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THESIS

MEASURING CUSTOMER AND EMPLOYEE LOYALTY AT SPACE AND NAVAL WARFARE SYSTEMS CENTER CHARLESTON

by

Michael L Jones

September 2005

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Thesis Co-Advisor:	Carol Smith
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As a Navy Working Capital Fund (NWCF) Activity Space and Naval Warfare (SPAWAR) Systems Center Charleston is faced with many unique and challenging business prospects. As a government activity with government employees, SPAWAR Charleston is uniquely aligned and charged to support the objectives and needs of its government customers by Congress. A NWCF activity is also a non-appropriated government entity that must rely, as any commercial sector business, on continued funding streams on a year to year basis. Unlike a commercial entity however, there are strict legal limits to how and what kinds of work SPAWAR Charleston can acquire and perform.

Given these unique circumstances, it is difficult to directly fit commercial management and measurement practices to SPAWAR Charleston or too many other Department of Defense activities. As SPAWAR Charleston continues to grow and expand its business base, it must be able to provide outstanding value to its customers while fulfilling its fiduciary responsibilities to the tax payers. New ways must be found to quantify, to measure and to take action on similar but different business factors than those used in the traditional commercial sector. This research focuses on the adaptation of commercial customer and employee loyalty measurement to a NWCF activity.

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MEASURING CUSTOMER AND EMPLOYEE LOYALTY AT SPACE AND NAVAL WARFARE SYSTEMS CENTER CHARLESTON

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Submitted in partial fulfillment of the
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MASTER OF SCIENCE IN SYSTEMS ENGINEERING MANAGEMENT

from the

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ABSTRACT

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I. INTRODUCTION

A. BACKGROUND

*Definition of **LOYALTY** –*

> The willingness of someone to make an investment or personal sacrifice in order to strengthen a relationship. (Reichheld, 2003, p 48)

In today's commercial business environment, being able to run an effective, growing and profitable business requires not only dedicated and satisfied customers but also new quality customers that will become the repeat customers of tomorrow. It is unlikely that a customer would enter into business transactions with a company that does not provide value in some fashion. Likewise, no company can survive, grow and have the value of future revenue streams from a cadre of satisfied customers without providing superior value on a continual and consistent basis. Together this mutual transfer of value creates a symbiotic relationship between customer and business.

Equally as important as satisfied, repeat customers is having happy, motivated employees. Companies must retain existing high quality employees while building and fostering a culture that attracts new and highly talented employees as the business grows. As the outward face of a business and as the single largest piece of intellectual capital a business 'owns', employee loyalty to the business and the principles for which it strives are often under estimated. Their judgments, experiences, and capabilities make the difference between success and failure (Bossidy/Charan, p.109, 2002). This enthusiasm is what creates, builds and reinforces the internal cultures of an organization; the culture that ultimately becomes one of the greatest attractors to both new employees and customers.

Yet these ideas of loyalty, culture, human capital and knowledge in the forms of experienced customers, employees and investors are some of the most difficult tangible assets of a business to measure (Reichheld, 1996, p 4). In fact they are so difficult to measure that modern day accounting standards do not list

them as assets on the financial records of a company. However, few seem to question that effective management of a company requires the understanding of these forces in order to stay competitive.

Focused measurement and the ability to harness and to effectively use the collected information of these basic, but fundamental, items has recently been the focus of many modern management theories such as 'Building a Loyalty Business', 'The Balanced Scorecard', and several other popular studies and discussions. All of these methods seem to have in common one focus area: customer and employee loyalty and retention. Focusing on either customer or employee acquisition and retention can provide for excellent growth. These two effects coupled together have the potential to lead to gains that neither one by itself could deliver alone (Reichheld, 1996, p 52).

Past Department of Defense Secretary (SECDEF) William Perry was insistent that the Department had to become more commercial like in its business practices. He and others under his direction initiated some of the most wide reaching business process restructurings in the Department's history. The current SECDEF Donald Rumsfeld has also been widely quoted on his continual support of the adoption of both best business practices as well as capturing the entrepreneurial sprit in the Department's ongoing business methods.

> As we prepare for the future, we must think differently and develop the kinds of forces and capabilities that can adapt quickly to new challenges and to unexpected circumstances. We must transform not only the capabilities at our disposal, but also the way we think, the way we train, the way we exercise and the way we fight. We must transform not only our armed forces, but also the Department that serves them by encouraging a culture of creativity and prudent risk-taking. We must promote an entrepreneurial approach to developing military capabilities, one that encourages people to be proactive, not reactive, and anticipates threats before they emerge.
>
> -- Secretary of Defense Donald Rumsfeld, Speech at National Defense University, January 31, 2002

However, it has become increasingly obvious that the government market is different than the commercial sector with different market dynamics and

restrictions. Therefore the application of non-tailored commercial methods to government dynamics is very difficult to apply. Instead, government must harness the spirit and intent of these commercial models and adapt them and develop them to its unique market situations.

SPAWAR Charleston provides a unique environment and opportunity to take business best practices and theories, abstract them and re-apply them to specific activities within the federal government marketplace. SPAWAR Charleston must be able to adapt and apply the business tools and methods that industry uses to continue its path of growth while providing outstanding value to its customers. It must do so in an effort to continue to attract and hold onto outstanding talent, identify current and new 'customers' to enter into strategic long-term relationships with and to have the information to make appropriate corporate investment decisions. One such commercial business tool and method is the measurement and application of employee and customer loyalty.

B. PURPOSE

The purpose of this research study is to adapt and apply the industry standard practice of measuring the strength and amount of customer and employee loyalty a business has earned. This is done in a variety of ways in the commercial sector but recent research has shown that focusing measurement on customer and employee loyalty and retention are the most powerful indicators of business success and growth.

Loyalty is measured through the application of a survey instrument designed to measure retention and other growth and satisfaction measurements. The customer survey instrument is designed to classify customers into groups based on the length of their dealings with SPAWAR Charleston. It solicits their personal feelings with respect to their loyalty and perceptions of the value they and their organizations receive from their relationship with SPAWAR Charleston. It also attempts to quantify the number of customers who would refer other potential customers to SPAWAR Charleston.

Employees are likewise surveyed through a similar instrument that seeks to understand how they perceive their value and loyalty to the organization. The focus is similar to the customer instrument, with the questions being only subtly different. The employee instrument attempts to quantify retention, business environment satisfaction and their perceptions of the business' culture. The employee survey allows for the classification of data by several group factors such as age, time with the company, etc.

Understanding current customer and employee feelings and perceptions about their relationship with SPAWAR Charleston is paramount to finding ways to increase, as well as hold onto, existing high caliber customers and employees. The goal is to establish a baseline of data that management can use to make better decisions on the investment of capital, changes in operating procedures and other changes to business methods and practices that are holding back or stifling potential growth. Repeat analysis using the same instruments will then allow management to track progress and find new areas to focus on increasing the value SPAWAR Charleston provides.

C. RESEARCH QUESTIONS

The primary purpose of this research is to measure the loyalty of both current customers and employees of SPAWAR Charleston and capture possible implications of this data on current operations and future business opportunities. The research questions therefore are grouped around these two bases.

1. State of Current Customers and Employees

The scope of the first part of the analysis is to gather data that will allow for an assessment of the current state of existing customers and employees. This will provide answers to the following questions:

a. How satisfied and loyal are the current customers of SPAWAR Charleston?

b. How satisfied and loyal are the current employees of SPAWAR Charleston?

c. Does SPAWAR Charleston have more loyal customers and employees than disloyal or indifferent ones?

2. Implications of Data on Future Business Operations

The second part of this analysis is focused on using the data collected in the first part to answer the more complex questions of the implications of the findings on future business capabilities. The following questions will be answered:

a. What findings exist that may provide insight into future growth of loyal customers and retention of existing ones?

b. What findings exist that may provide insight into future acquisition of loyal employees and retention of existing ones?

D. BENEFITS OF THE STUDY

The benefits of this study are the application of a widely accepted commercial business practice to the business of SPAWAR Charleston. This study will help the command and the Navy in their effort to understand the applicability of industry standard practices to its activities. It will also help the command achieve a better understanding of their customer and employees feelings towards their business relationships with SPAWAR Charleston and pursue the goal of finding methods and tools to improve the attraction of long term customers and employees.

E. SCOPE AND METHODOLOGY

The scope of this thesis is focused on the completion of activities required to obtain and analyze customer and employee loyalty information. Firstly, a general background in customer and employee loyalty economics and methods

for assessing loyalty will be assessed. Secondly a survey instrument will be adapted and provided to key customers and employees. The output of this survey instrument will be analyzed to find to give a measure of current loyalty and satisfaction with the business practices of SPAWAR Charleston. This data will then be used to search for trends that will be presented to management for strategic planning purposes.

The scope of this initial study will be limited to the clients and employees of the Code 61 Division within SPAWAR Charleston. This limitation of scope will still give a sufficient pool to apply the methods without trying to canvas the hundreds of customers and thousands of employees across the entire command. Once a baseline of data is established, reapplication to the command as a whole should be achievable with little structural change.

II. SPACE AND NAVAL WARFARE SYSTEMS CENTER COMMAND ENVIRONMENT OVERVIEW

A. INTRODUCTION

To effectively apply any business process to an entity and its business area, one must first understand the businesses' focus, the market dynamics and the environment in which it operates. Since SPAWAR Charleston has a unique set of business environment rules that differ from a typical commercial company, an exploration of these rules and their implications is necessary in steering the appropriate application of commercial business theories to a NWCF activity.

SPAWAR Charleston is governed by the law under Section 2208 of Title 10 of the United States Code of laws (Appendix A). This section allows the Secretary of Defense to establish working capital fund activities within the Department. There are currently five such funds: Army, Navy, Air Force, Defense-wide, and the Defense Commissaries. These funds are required to operate on a break-even cost over time method, and therefore are not allowed to make a profit in the conventional commercial sense.

SPAWAR Charleston is also governed by other laws that define general practices throughout the government, such as 41 United States Code (U.S.C.) 253 the 1984 Competition in Contracting Act (CICA), 31 U.S.C. 1535 known as The Economy Act, and others too numerous to mention here. These laws were designed to instill faith in the tax paying public - that the government was and is a fair and honest spender of their tax dollars. Many large commercial companies also have similar internal procurement policies, but rarely are they as large or rigid as those of the federal government.

How employees are compensated and thereby aligned to their respective tasks is also an important component of any business environment. SPAWAR Charleston enjoys a unique compensation system within the government, which allows for more flexibility than the traditional General Services Administration (GSA) schedule methods use.

The GSA method is based on time in grade and seniority with some consideration given to performance. SPAWAR Charleston is one of a few activities that use a program called the Demonstration Project. The Demonstration Program focuses on an individuals work and performance as the basis for evaluation and future monetary rewards in the form of pay increases or bonus pay. No consideration is formally given to time in grade in this program in determining pay, and therefore employees must actively 'earn' their way up the pay scale. This is similar to most commercial companies, where employees have to continue to achieve targets and earn their pay raises year-to-year.

All of these laws, as well as other regulations and rulings from the Executive and Judicial branches of the government create a more challenging and limited field than the largely unfettered capitalism that rules in the commercial market. Each area needs to be examined and assessed for potential impacts on the application of a commercial method to government business practices. Doing so will lead to a more accurate and useful application of these practices. A full analysis of this complex environment would consumer tomes of information, and therefore for the sake of brevity and focus on this thesis topic, the discussions will be limited to the most important aspects and findings in each area.

B. NAVY WORKING CAPTIAL FUND BACKGROUND AND BUSINESS PRACTICES

In 1991 the Department of Defense established the Defense Business Operations Fund (DBOF). The purpose of this fund was to foster a more business-like culture within selected Defense operations (Brock, 1997, p. 3). It has also been stated that the purpose of DBOF is to 'provide a business management structure that encourages managers and employees of DoD support organizations to provide their products and services at the lowest cost' (Spaulding, 1996, p. 20-3).

Naval Command, Control Ocean Surveillance Center, In-Service Engineering, East Coast Division (NISE East) became a DBOF activity in 1993

(Spaulding, 1996, p. 20-3). NISE East was formed from the consolidation of the four east coast naval electronic engineering activities as directed by the Base Realignment and Closure Commission (BRAC). Those activities were the Naval Electronic Systems Security Engineering Center, Washington, D.C., certain portions of the Naval Electronic Systems Engineering Activity in St. Inigoes, Maryland, and the Naval Electronic Engineering Centers in Charleston, South Carolina and Portsmouth, Virginia. This activity was headquartered in Charleston, South Carolina. The Washington office closed in September 1995, and the St. Inigoes Detachment closed in October of 1997.

In 1996, the DoD Comptroller reorganized DBOF into the Working Capital Fund Activities (WCF). Prior to this reorganization, DBOF funds had been handled as one monetary account at the DoD Comptroller level. This created substantial problems because the account did not allow sufficient tracking of each service's cash flows. The reorganization moved the management of these activities to each service head, and five different WCFs were established. The WCF activities do a substantial amount of business within the DoD and other government agencies. In 2004, they are expected to account for $85.5 billion dollars worth of expenditures.

In 1997, NISE East was renamed Space and Naval Warfare Systems Center Charleston. Since that time, further realignments have added substantial portions of the Navy's telecommunications engineering facilities to SPAWAR Charleston. In 2003, SPAWAR Charleston performed and delivered over $2 billion worth of equipment and services to its customers.

Regardless of the name DBOF or WCF, the main goal of these activities was to consolidate the many revolving funds in use by the services in areas such as supply, transportation, etc., into a larger set of entities that were focused on controlling costs and providing the best goods and lowest cost services where a buyer-supplier relationship exists. Additionally, these new activities were to allow for improvement in cost estimation and cost control through the use of

standardized and stable prices and rates for goods and services. It also aimed at increasing cost awareness for managers.

Revolving funds work essentially like a cash account: money flows in for orders and services; money flows out for the costs of procuring those services. In 1991 there were two primary categories of funds (Spaulding, 1996, p. 20-3):

1. Stock funds – dealing with procuring and stockpiling material inventory in volume from commercial sources, which is then sold to service customers.
2. Industrial funds – provided industrial and commercial goods and services such as maintenance, transportation, and research and development.

DBOF activities are only allowed to charge their customers for the cost of running the business plus the cost of procurements of the raw good and services rendered. As noted prior, these activities were authorized by Section 2208 of Title 10 in the United States Code (Appendix A). Section 2208 allows for the establishment of working fund activities and mandates that they operate as a break-even entity over time.

Working capital fund activities are allowed to draw monies from the working capital fund to fund operations between the time work is begun and the time that payment is actually received from the customer for those services (Spaulding, 1996, p. 20-4). In reality, this is true for the stock type funds as well as some of the industrial funds where that WCF's activities are required to buy, add value to and hold services or products until a customer needs them.

An example of this type of activity is the procurement of ammunition. The military services obviously consume a large amount of standard rounds of ammunition that are not necessarily readily available in the commercial market place. A stock type WCF may be employed to purchase large lots of standard ammunition rounds for storage and later procurement by the services. The WCF activity, by buying in large lots, is able to work with vendors to reduce acquisition costs. This may be through volume pricing, the lower potential costs of not having a production line open just for a specific ammunition types 365 days a

year or many other business and price related factors. The WCF is then allowed to 'mark up' the 're-sale' of the ammunition to the end customer to cover the costs of procurement, holding, management expenses, etc. Over time, this is supposed to allow the activity to return the capital to the fund, and therefore operate as a break-even revolving activity.

In the area of cost estimating and stabilized rates, customers of a WCF activity are billed at what is called a stabilized rate. This rate is a composite of a number of costs including: hourly labor rate, production overhead rate, general and administrative rates, and recoupment (Spaulding, 1996, p. 20-13). A similar system is enforced by the government on its commercial cost reimbursable contracts. The main difference is that in many cases a contractor is allowed to make a reasonable, but often negotiated, profit. Each of these rate segments are managed separately after collection: hourly rate pays the employee, production overhead is money the organization is allocated for business costs such as infrastructure and business improvements and general and administrative rates pay for items such as supplies, information technology and utilities.

These stabilized rates are built using a 3-year cycle consisting of last year, current year and next year predicted rates. The levels of these stabilized rates are set such that all current costs are covered in the areas of hourly rate, production overhead, and general and administrative costs. The recoupment portion of the rate is adjusted to allow the WCF activity to charge or credit an additional cost in order to 'make up' for previous years where the stabilized rate was either too low or too high to break even.

There is a strong desire to keep these rates as close to break even as possible, since not doing so would, over time, cause the balance of the WCF to diverge from the congressionally mandated break-even point. If the WCF were required to continue to increase the costs of recoupment because it under cut its costs in the past, it would not only make the WCF's rates for work unattractive, but would also throw off managers ability to do more accurate cost estimating. In instances where the WCF overcharged in the past, it can actually lower and in

many cases be forced to lower its current year's rates to again reach a long term, zero gain balance in the WCF.

Unlike a commercial entity, typically all of the funds collected as a result of these components must be spent within the fiscal year in which they occur - no or very little carryover is allowed. In reality, the equation to determine how much funding can be carried over the fiscal year is far more complex then this simple statement. This simplification is sufficient however for the understanding that by this rule customers are kept from using the WCF activities to 'dump' cash at the end of the year to make it look like the funds were spent. This is an important safe guard for high level decision makers and congress, as it makes it more difficult for programs to 'hide money' at the WCF activity level.

The WCF activity is not allowed to hold or retain capital or cash for future expenditures nor does it have shareholders to return compensation to directly in the forms of dividends, stock buybacks, etc. This puts substantial pressure on the system to find ways within a given fiscal year to allocate and spend these funds against. A WCF can not 'time the market' or 'wait for changes in the market' to choose when to invest its production overhead funding in as of yet unknown activities, nor can it hoard or sit on cash reserves like commercial corporations do.

Of the four components of the stabilized rate, the production overhead rate is the only funding where the charging WCF activity is allowed to charge its customers a controlled fee that can be applied to 'capital expenditures'. This figure is calculated as an indirect cost of doing business with a customer, such as staff support, infrastructure support, etc. This figure is tightly controlled and all funds collected in this manner require complete annual expenditure.

The production overhead money is allowed to be collected and spent on capital improvements that will later benefit all customers of the WCF activity. For instance, the WCF activity can utilize these funds to invest in employee training, infrastructure development and other activities that may be necessary to conduct operations. These are costs that can not be directly billed to the customer as

work performed. Since the overhead rate is only collected when actual work is performed for customers, there is a very specific boundary to how much overhead is available for yearly capital expenditure. Under current law the only way a WCF activity can legally do that is to have more funded customer work orders.

Despite the outright technical differences between profit and overhead in the WCF activity, they can be treated essentially identical in such cases where a company retains earnings from profits to increase and streamline the company's capabilities in providing better service to its customers, or to strengthen capabilities in new or weaker business areas. The main difference is that a company can hold retained earnings essentially indefinitely, while a WCF cannot.

As a consequence, these business dynamics can force a WCF activity into a growth mode of finding more work to pay for the ever-increasing price of necessary capital expenditures to stay competitive and to best serve its government customers. SPAWAR Charleston management, as well as the management of all WCF activities, therefore has to be more careful in allocating its overhead to worthy capital improvement expenditures as compared to a commercial entity.

The WCF cannot simply right off bad investments, draw upon more debt or used retained earnings to fund initiatives that may outstrip current overhead funding capabilities. A WCF activity may have to allocate successive years of overhead in advance to complete an activity, and the inability to draw on debt, either to external organizations or share holders, can leave the organization vulnerable in events of a large market shift or any other number of changes similar to a business.

However, because this comparison of profit to overhead is so limited, a commercial model that focuses on profit maximization, as a key indicator would be a poor fit to SPAWAR Charleston. Application of a commercial measurement that measures and predicts growth through means other than profit is needed. The measurement of customer loyalty or customer satisfaction which focuses on

measuring the value of the customer-provider relationship, treating profit or overhead generation as a fringe benefit, should be a satisfactory fit to the business of a WCF, such as SPAWAR Charleston.

C. LAWS AND REGULATIONS AFFECTING WORKING CAPITAL FUND ACTIVITIES

There are several laws and regulations that control how WCF activities are allowed to conduct business. Some of these laws have a close parallel to commercial practices. In many other cases there are no similar written laws, but instead market dynamics and cost barriers enforce a similar set of naturally occurring laws in the market place. A commercial firm is not specifically disallowed to work against these forces; it just does so at its own peril.

There are specific regulations or executive orders that limit the abilities of a WCF activity. These are best paralleled to internal operating procedures of a commercial entity, but in the WCF case they can often be backed by fines and/or jail time for employees who do not follow them. In the commercial world an employee who went against company policy is merely removed from the company's employment, saying that such instances did not specifically violate other portions of commercial law.

The first of these restrictions is that WCF activities are not allowed to accept or perform work that is not within their charter as an organization. The WCFs were not established to create competition with one another nor with the commercial market place. SPAWAR Charleston for instance is not allowed to take on work for providing transportation services where there is already another WCF that provides that service. Nor is SPAWAR Charleston allowed to openly compete with work that can be performed in the commercial market place. SPAWAR Charleston is not allowed to bid on government contracts nor is it allowed to enter into sub-contracting roles with commercial companies except in a very narrow area where only the government can provide a specific service.

This restriction combined with the fact that the WCF charters are often loosely worded, has no doubt allowed for the sometimes creative interpretation of the charter in order to acquire new business. Changes to a WCF's charter have to be approved by the activity that is directly responsible for the WCF. Currently due to an oversight on the part of past sponsoring officials and due to the rapid changes in government and the Department of Defense in the last decade, SPAWAR Charleston does not currently have an official Navy signed charter. One is in work and awaiting signature, but it has not been finalized.

WCF's are also allowed to perform work within their charter for any other federal government activity provided that certain controls discussed later are also met. These other government agencies must understand however that a WCF is first duty bound to support its sponsor and only after meeting that obligation, other activities as time and personnel allows.

Another restriction is that SPAWAR Charleston is not authorized to draw from the WCF, and therefore must have a funded work order from a customer before commencing work. Doing work without such an order is expressly forbidden by a collection of laws, the largest of which is the Anti-Deficiency Act. Under 31 U.S.C. 1517, this act forbids anyone in the government to make or authorize an expenditure or obligation without express written authority from Congress to do so. It also forbids anyone in the government from committing more funds to an authorized expenditure than are available. Violations of this law are very serious and can result in large fines and/or jail time for offenders. The inability of SPAWAR Charleston to draw from the working capital fund makes it look from the outside as if SPAWAR Charleston runs almost like a commercial entity, except one that can not draw on a debt instrument to fund activities.

Further, 31 U.S.C. 1341 prohibits the expenditure of funds in anticipation of funding from Congress or after an appropriation has expired. All monies allocated by Congress have very specific timelines in which the money set aside for a task can be committed. There can also a potentially different timeline over

which the monies can actually be billed against, or expended, in completion of the task. For instance, dollars allocated by Congress for procurement can be allocated to perform the procurement over a three year timeframe. The actual expenditure of those funds in procuring the required items can last an additional 2 years. SPAWAR Charleston employees are lawfully bound to follow these rules.

There are a vast number of laws that define and limit how the government and government activities can buy or acquire services. The two most important are called the Competition in Contracting Act (CICA) and the Economy Act. Both of these laws are important shapers of the ways in which a WCF activities is allowed to conduct business and which further mold the government market place.

Public Law 98-369, or CICA, made it mandatory in preparing for the procurement of property or services by an executive agency that the agency specify its needs and solicit bids or proposals in a manner designed to seek full and open competition (Spalding, 1996, p. 5-5). CICA requires that a government entity gives the commercial market space a chance to compete for all of its procurement needs. This does not mean that the procuring government agency can not use a government activity, merely that is must also give commercial entities a chance to compete for the work. This then allows the procuring agency to make the procurement based on best value, and also helps fulfill the WCFs requirement to be a benchmark for costs and cost estimating. In other cases, a less technical activity can use a WCF activity like Charleston to handle the management and oversight of the work that is, then in turn, performed in the commercial sector.

The second important procurement law is called The Economy Act which is 31 U.S.C. 1535. This act allows one government activity to procure supplies or services from another activity in the government when specific requirements are met as laid forth in the statute. In many cases the use of The Economy Act is further limited by the heads of each executive agency, and the Department of

Defense is no exception. The Secretary of Defense has issued a directive that no Economy Act orders will be allowed outside the DoD without meeting an even more strict set of rules and not without specific permission from him or her.

There are numerous other laws, regulations, and executive orders that limit and control the methods and operations of the government, and therefore WCF activities such as SPAWAR Charleston. The ones discussed in this section are possibly the most important from a macro level of the organization, and are in fact re-enforced regularly and annually in mandatory employee training.

None of these laws specifically bars SPAWAR Charleston from 'marketing' its services, but they do provide guidelines in how that business can be acquired, how it may be carried out and what style of work may be performed. However, there appear to be no immediate barriers in applying an appropriate commercial tool that focuses on best value measures vice measures that are specifically barred by law or regulation. These measures should not focus on profit, share of wallet or other similar profit driven commercial markers. Instead those value and integrity measures are far better measures for this type of business environment.

D. PAY SYSTEM AT SPAWAR CHARLESTON

The conventional compensation system used in the Federal government operates under a program maintained and coordinated by the Office of Personnel Management (OPM) called the General Schedule. This schedule sets out 15 different grades of employment with 10 steps in each grade. The lowest grades are paid the least and the highest the most. The qualifications for a job dictate at which grade the incumbent is placed.

To advance from one step to the next in a given pay grade, the employee must meet an acceptable performance level and have spent the required amount of time at the current step as defined in the GS schedule. At the present time, the timeline to go from Step 1 to Step 10 in a given grade is approximately 18 years. Shifting to higher grades allows for an employee to be moved to different steps depending on the requirements.

Unlike the GS schedule, SPAWAR Charleston operates under a schedule called the Demonstration Program, or Demo Program for short. This program was authorized by Title VII of the Civil Service Reform Act of 1978. The authorization allowed OPM to allow several federal agencies to conduct demonstration projects in order to determine if changes in personnel management policies or procedures would result in improved federal personnel management. By law, such experiments were limited to a total of 10 active projects, could last for a maximum of five years, and were limited to a maximum of 5,000 employees each (SPAWAR Civilian Personnel System handout, 1999, P1).

The current Demo Program started in 1980 and was made permanent in the Public Law 103-337, the 1995 Defense Appropriations Act. This law also provided a mechanism for other organizations in the DoD to adopt a similar system. In 2003, the National Defense Authorizations Act required the implementation of the National Security Personnel System (NSPS), a similar but not identical program to that of the Demo Project scheduled for implementation in the near future in all of the defense department.

The Demo Project attempts to rectify problems with the GS schedule in the following areas (SPAWAR Civilian Personnel System handout, 1999, P2):

- **Classification:** The system required lengthy, narrative, individual position descriptions which had to be classified by the use of complex and often outdated position classification standards. The system caused delays in recruiting, reassigning, and promoting employees. Line managers had only limited flexibility to administer personnel resources; often personnel staffs were in an adversarial role with line management.
- **Performance appraisal:** There were insufficient means to reward good and penalize poor performance, and a lack of a system to establish performance expectations for an employee prospectively, assess achievements, and grant or withhold financial rewards.

Rewarding or penalizing performance required inordinate paperwork, often discouraging managers from taking warranted action.

- **Pay:** Few incentives and little flexibility existed in dealing with all levels of the work force. Pay was not always commensurate with performance. Inflexibility in pay setting limited management's success in retaining the most valuable employees.
- **Reduction-in-Force:** There was an inability to recognize performance as a major criterion in RIF situations which sometimes resulted in adverse effects upon good performers.

The Demo Project pushes the responsibility for performance and recommendations for promotions to first line managers vice relying on a set of stringent rules and other less personnel methods. To accomplish this change, the Demo Project includes the following (SPAWAR Civilian Personnel System handout, 1999, P2):

- A more flexible, manageable, and understandable classification system that aggregates several GS grade levels into broad pay bands
- A simplified performance appraisal system that links compensation to performance
- An expanded application of the CSRA merit pay concept for both supervisory and non-supervisory employees at all grade levels
- An emphasis on performance as a primary criterion for retention in reduction in force, while retaining tenure, veteran’s preference, and length of service factors.

The system is defined by a series of three broad pay bands (Figure 1): Scientists, Engineers and Senior Staff are in the DP scale, Technical and

Administrative Specialists and Technicians are in the DT/DA/DS scale, and Clerical/Assistance staff are in the DG scale.

Each pay band is subdivided into one to six steps. Each step covers at least two grades in the GS pay scale, and the higher steps reflect a higher level of job accomplishment, personnel achievement, and difficulty. The Demo Program maintains the GS occupational series rating, but limits official titles to ten broad categories.

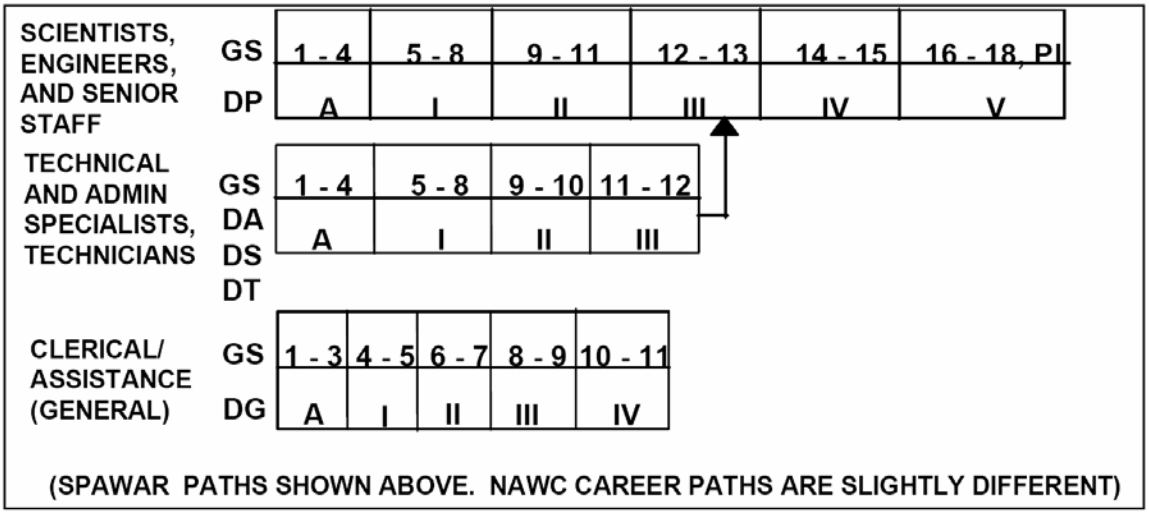

Figure 1. Demo Program Pay Scales

Each year, typically in the June timeframe for SPAWAR Charleston, first line supervisors review the immediate past year's performance with each employee. During this time they also set performance objectives for the next year. Each first line supervisor then makes a recommendation to his immediate supervisor regarding the performance of his or her employees for the year and recommends the type and level of incentive that each employee should receive for that year's performance. The manager rolls up the recommendations of all the first line supervisors within his or her span of control for certification to the department manager. The department manager certifies the recommendations and forwards them to the commands Executive Director, who has the final say in all performance pay issues.

Each first line supervisor is allocated a pool of points to apply to each employee's performance. There are two types of points available: continuing points and bonus points. Continuing points are permanent increases to an employee's salary while bonus points are a one time cash payout for performance during the year. The number of each type of points available to a first line supervisor is calculated using a formula for each point type and based on the number of employees in each pay band on June 30th of the year. These formulas therefore enforce a cap on the total number of points available in the total pool as well as to each first line supervisor.

The performance ratings that are given to each employee set definitive requirements for the number of points that must be allocated to an employee for a given level of performance (Table 1). While each level dictates a number of points, the number can be reached by combining continuing and bonus points. Comparability is an employee's ability to receive cost of living and other yearly increases such as locality adjustments that may be authorized by Congress. Employees who receive an unacceptable rating must be reassigned to a new position, downgraded or removed from employment.

If an employee is near the top of their pay band, they can only be awarded enough continuing points to bring them to the top of the pay band. Any money over the top of the pay band is paid as a cash bonus. Likewise, employees that are already at the top of their pay band are not eligible for continuing points and can therefore only receive bonus points.

RATING	POINTS	
	SALARY INCREASE AND/OR BONUS	COMPARABILITY
OUTSTANDING	3 OR 4	FULL
SUPERIOR	2 OR 3	FULL
SUCCESSFUL*	0, 1, OR 2	FULL
MARGINAL	0	1/2 OR 0
UNACCEPTABLE**	0	0

Table 1. Demo Program Rating Table.

Each level in the pay scale has a calculated midpoint salary amount. This midpoint is used in two ways. The first is when an employee's Demo Program pay ranking is being converted to a GS equivalent; those above the midpoint are generally awarded the higher GS classification of the scale they are converting from. For example: an employee who is at the DP-IV level needs to move his Demo Program to a GS equivalent: if he is above the current midpoint for the DP-IV level he would be converted to a GS-15 rating vice a GS-14. The second is for employees who are awarded a successful rating. Any employee who is above the midpoint and receives a successful rating may only receive zero or two continuing points but not one.

Overall the system allows employees who exceed expectations to receive pay increases that are much higher than the step increases allocated to employees in the GS pay scale. It also allows for the awarding of performance through one time cash payouts, vice special recognition and smaller bonuses in the GS system. Employees who are performing at the successful level are held at a constant level of pay with comparability, and those who are performing poorly move essentially down in the pay system and/or out of the pay system entirely.

This pay system parallels, in many respects, that of a commercial entity. Increased pay is awarded to those who compete, meet objectives and contribute to the overall health and well being of the organization. Employees who perform adequately continue to be employed as long as the company remains in business. These adequately performing employees generally experience moderate amounts of job success and may achieve promotion into lower level management positions.

There are three notable differences that should be pointed out in a comparison of the Demo Program to a commercial pay model, besides the fact that the government does not have some of the more obvious fringe benefits of the commercial market such as stock options or profit sharing. The three main

areas that need to be mentioned are: the way underperformers are handled, the constraint the limited number of points puts on distribution of raises and bonuses and the focus on individual performance and the inflexibility this causes in awarding consistent front line and/or team success.

The way underperformers are handled shows the largest difference between a commercial enterprise and SPAWAR. In the Demo Program, underperformers straddle two categories: marginal and unacceptable. Marginal ratings effectively pushes people backwards in the pay scale, but no other major adverse effect occurs except in the cases of a Reduction In Force (RIF) or other similar mechanisms where a permanent downsizing may remove people in this category in favor of holding on to more achieving individuals. Unacceptable ratings are the first area that has true mandatory actions of reassignment, dismissal, etc.

How employees are handled in the unacceptable rating area is more difficult in the government sector than the commercial one, even in the more liberal Demo Program vice the GS pay system. To remove any employee from government service requires substantial documentation, counseling and other procedures that are rigidly defined by law and policy. This was done for a number of reasons, the main reason being to protect government employees from the cycles of newly elected officials being able to easily remove employees who don't necessarily agree with the current administrations party line. The rule still makes removal of underperformers difficult, even when the rating was given by a non-politically motivated supervisor and peer. In the commercial sector, companies have much less red tape and a much wider range of latitude to lay-off or remove people from their employ.

The next area of major difference is in how points are distributed and how many points are available to distribute. The maximum number of points that are available for handout is rigidly defined by a formula based on the total number of people employed in the same command or business unit at the end of June. These points are then distributed down the organizational line where so many

points are allocated to each supervisor based on the number of people working for them. The number of continuing points issued for each employee is set at 1.5 points per employee, which represents approximately 2.3% of all salaries. The number of bonus points available is set at 1% of midpoints.

This means that any given first line supervisor has a constrained pool of points for allocation. Even if their performance warrants, not everybody in a group can get an outstanding rating without that supervisor 'trading' points with another supervisor who has residual points. Points become available for these 'trades' when too many individuals in a group are either rated as marginal/underperforming/successful, one group has a high number of employees who are at the top of their pay band and are therefore ineligible to receive continuing points, and/or up-line supervisors have points left to delegate lower or forcibly change lower ratings to free up points. It is possible for everyone to be superior however, and that can create the temptation for supervisors who are shy from conflict to award the same rating to everybody in his or her group.

Further, the system of review and promotion focuses on individual performance, or said differently, it focuses on an individual's performance in relation to ones peers. This in itself creates three additional sub-problems. The first is that since a first line supervisor generally only judges the performance of individuals under his or her authority directly, as a result performance is only judged relative to others under the same supervisor. This can lead to problems when one supervisor's group contributes more to the success of a division, department or command than another. Under the Demo Program as it is employed, each is treated effectively separate and equal.

In groups that do not have a good mix of same type and job rated peers, individuals have a much harder time understanding how they stack up to their equivalent peers operating under other supervisors. Up-line supervisors can change the recommendations of lower level employees if they deem it necessary, but it is still not an effective or necessarily objective method for

determining a groups overall contribution in any given time frame. It also raises potentially artificial barriers to employee movement around the company and to other programs, projects or business area.

The second problem with the Demo Program focus on the individual is that there is no reward for extra-ordinary team success or participation. The Command has one time bonuses that can be paid out, letters of commendation, etc., but these until recently were not close in dollar amount to the amounts available at the end of the review period, and the Command has not effectively established a culture where recognition and non-monetary rewards have equality with monetary rewards. Under the current Demo Program there is just no easy way to award a team who together may achieve some substantial achievement on behalf of their customer or the tax payer.

The third problem with the narrow focus on the individual is in the area of having multiple 'bosses' but only one supervisor. In a highly mobile and agile workforce, individuals from any number of first line supervisor's groups should be able to be pulled together to build an effective team to complete a project. This is usually because team efforts require multi-disciplinary members and first-line supervisor groups tend to be focused in individual technical areas. When review time comes, first line supervisors are 'encouraged' to get performance information from team leads. Doing this is not mandatory, so is often skipped due to any number of issues. One such example: because of the time required to perform all of the individual reviews, there is simply not enough time to collect information on the typical 10-15 individuals in the review pool from everybody.

The facts presented above can lead to any number of alignment issues with respect to employee loyalty within the organization. For instance, a first line supervisor's views may not coincide with a team lead's/project manager's view of success for instance. This fosters an environment that creates confused and disgruntled employees who don't know who to believe or what to truly do to maximize their performance for promotion and pay increases come review time.

Further, employees also perceive limits and resistance to lateral transfer, much of which is artificial, but not dispelled actively by management.

Commercial companies on the other hand have wide latitude in setting, tracking and modifying their pay scales, pay systems and other incentives for performance related activities. Groups may get pay raises based on individual performance and bonuses based on meeting larger group goals for instance. Likewise, there is no artificial limit to the amount or size of these monetary rewards other than those set by the company itself. It they want to return 25% of profits to employees they can certainly do that with little regulatory hassle, even though investors and stakeholders may not be pleased.

Both the demo program and commercial pay systems are rooted in the 'increased pay for increased performance' method. Any method of assessing employee loyalty that is targeted against this fact should be suitable for use in the Demo Program environment. Some of the shortcomings of the Demo Program, such as peer review standards, can be affected by the team without changing anything in the program, and therefore become a local policy and procedure issue instead of a fundamental flaw. An effective measurement tool should use measures of contribution, value, team cohesiveness and other similar tools to effectively gauge the SPAWAR Charleston employee base.

E. CHAPTER SUMMARY

This chapter provided a thorough review of the SPAWAR Charleston business and employment environments. These two areas are the focus of a substantial amount of research and writing in the commercial business sectors in both the academic as well as the commercial sphere. Before applying a commercially derived loyalty model to a government not-for-profit entity it is necessary to ensure that the business dynamics of SPAWAR Charleston are sufficiently near enough to the commercial entity it was designed for to be applicable.

This chapter has shown that there exists a motive to acquire new customers, keep repeat customers and enhance the value proposition of those relationships for all involved, even though there are substantial legal controls on the business prospects of SPAWAR Charleston. Likewise, there exists a performance based pay system that is very similar to those used in the commercial space to promote employee retention through awards to employees for their actions and performance. Understanding these relationships is necessary for applying commercial loyalty measurement tools to the business of SPAWAR Charleston.

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III. LITERATURE REVIEW AND ASSESMENT METHOD

A. INTRODUCTION

On average, U.S. corporations now lose half their customers in five years, half their employees in four, and half their investors in one (Reichheld, 1996, P 1). Intense research over the last decade and a half has shown that these two forces of opportunistic customers and unmotivated employees have lead to massive losses of potential revenue for hundreds of companies in the commercial sector. As such, ways to correct and reverse these trends have been the focus of many of the management science texts of the last 10 to 15 years.

Customer satisfaction measurement has been a primary tool of business for almost two decades. Yet studies have shown that 85 percent of an organization's customers claim to be "satisfied" but still show a willingness to wander away to other providers (Griffin, 1995, P 3). This research seems to point out that the focus on customer satisfaction, while admirable, has been misplaced and often misused or just plan misinterpreted.

Since the 1970s, American companies have waged a fierce battle to win market share (1995, Griffin, p. 5). The thought and practice was to attack ones competitor and his or her brand directly and aim for winning as much of the market share as possible. As each company in a competitive market place added new features or product lines to woo new customers and attempt to hold onto others, this action lead to huge swings of customers from one company to the next.

Companies that did not understand their customer's needs eventually found that competitors could make inroads by offering products or services better aligned to their customers' preferences (Kaplan, p. 63, 1996). Companies that focus on acquiring and holding onto loyal customers routinely and consistently outperform their peers in their respective market segments and often do so without sacrificing price, quality or service. For instance, it was found some

years ago that raising customer retention rates by five percentage points could increase the value of an average customer by 25 to 100 percent (Reichheld, p33, 1996). This focus on the customer required businesses to retool employees while trying to keep them highly motivated.

Holding onto repeat customers can not be reflected solely in price and price related factors. Instead, business interactions are focused in the area of value creation. Customers strive to find and employ the best value for their dollar, not just the cheapest price. This is even the case today in government contracting, where new contracts are awarded based on best value to the government vice only awarding to the lowest bidder.

One of the company's strategies can then be defined by the customer and market segments that it chooses to target (Kaplan, 1996, p 64). Marketing textbooks go one step further and talk about the four P's: Price, Place, Product, and Promotion. Each of these areas strives to create an overall environment for a company's goods and services. All of these tied together also attempt to transmit the 'value' of doing business with a firm to the ultimate end customer. Attention to detail in each is required for product success.

Creating value for customers builds loyalty, and loyalty in turn builds growth, profit, and more value (Reichheld, 1996, p 3). Frederick Reichheld points out in his book "The Loyalty Effect" that profit can not be the sole motivation of a company, but that profit is merely a consequence of the value creation process (Reichheld, 1996. p 3). Good companies create value 'transferring' relationships with their customers. They get to know their customers intimately, how the value proposition works for each specific type and style of customer and how to work with those customers to strengthen the existing relationships. Companies that try to be everything to everyone usually end up being nothing to anyone (Kaplan, 1996, p 64).

Likewise, loyal customers value and often require consistent and repeat handling by loyal employees. Satisfied employees are a precondition for increasing productivity, responsiveness, quality and customer service (Kaplan,

1996, p 130). Loyal employees get to know their customers, figure out how to maximize the services or products a firm can offer its customers and builds loyalty as the face of the business enterprise. Yet the general trend in business today does not always seem to involve a search for ways to keep employees longer and help them earn more money.

It often seems the goal is quite the opposite: finding ways to pay employees less, or actually get rid of them, especially those with the greatest experience and the highest compensation (Reichheld, 1996, p 92). Most companies do not treat employees as assets, instead they view them as salary expense and therefore just another item that can be trimmed or cut to boost profits in the short term. This short sighted approach to employee management destroys employee loyalty, destroys company culture and alters the norms and values that employees hold towards their employer and work environment. It also has the potential, especially in businesses that require large amounts of direct customer handling, to destroy relationships with long standing customers or potential new, repeat customers, all together.

One method of measuring the 'worth' of employees, customers and the value of their interactions is through the measurement of loyalty. Assessing a business' capabilities based on loyalty should therefore satisfy the requirements laid out in the previous section of this thesis that would be applicable to a Working Capital Fund (WCF) activity:

- Be focused on value creation, not profit
- Be focused on integrity, lawfulness and best value
- Measure team satisfaction, retention and contribution

Finding and measuring the loyalty of customer and employees allows a company to acknowledge and assess the value of these interactions and to build trends and make predictions based on those trends with respect to business growth and retention. Once a reliable baseline is established, goals can be set and used to manage the day-to-day operations of a thriving company. This

chapter will focus on describing customer and employee loyalty, the business process for implementing loyalty measures and the construction of a measurement instrument for base lining customer and employee loyalty at SPAWAR Charleston.

B. CUSTOMER LOYALTY

Customer loyalty calls for companies to create tremendous value for their customers, to share value expansively by giving managers and employees a partnership interest in their work, and to deliver exceptional value in the form of profits to the investors who make the business possible (Reichheld, 1996, p 33). In the loyalty business model companies need to focus their efforts on finding and attracting the right kinds of customers. Customers that are ultimately motivated by value, not necessarily price shopping, are some of the most highly sought customers in the competitive marketplace.

Jill Griffin in her book titled "Customer Loyalty: How to Earn It, How to Keep It", describes the seven stages of a customer (Griffin, 1995, p 34).

- **Suspect**: Suspects include all potential customers who might use a firms products
- **Prospects**: A customer that is in need of a firm's direct product or service has the ability to buy, but is not yet a customer.
- **Disqualified Prospect**: Potential customers a firm knows enough about to know they do not need or have the ability to buy a firm's products.
- **First Time Customer**: Just what the name implies: a new first time customer. Does not have to only purchase from you however.
- **Repeat Customer**: Have purchased two or more times, buying the same product or more than one product or service.

- **Client**: Buys everything a firm has to sell that he or she needs. Denotes regular purchases and typically has a strong, ongoing relationship.
- **Advocate**: Advocates have all the qualities of a client, but will also endorse your products or services to other friends or acquaintances. The most powerful of all client types and the ones that let a company tap into the power of informal networks of referral.

One of the most interesting descriptions of how to view a customer in a loyalty business model is as an annuity (Reichheld, 1996, p 62). In most industries there is generally an initial outlay of capital to acquire each new customer for the firm, whether through advertising, marketing or direct contacts. Only over time can the repeat business of that customer and the profits that are earned from the business interactions repay that initial investment and then provide profit for the company.

Good companies do calculate the acquisition cost of each new customer. There seem to be many who do not, and SPAWAR Charleston has been no exception. To a company that has no apparent cost to acquire a relationship, every relationship appears to be profitable. But at what cost does this indiscriminate customer acquisition cost come?

In some businesses, little information of any depth is usually known or researched about any given specific customer. Large amounts of money can be spent in initial marketing for a brand based on demographics, purchase habits, and any other number of survey-able, but ultimately impersonal attributes. This may get new customers in the door, but a loyalty based company would ask, “At what quality? And how often does just getting them in the door lead to first time and ultimately repeat customers?” Rarely can a firm attract a repeat customer with the same mechanism used to get them in the door the first time. The sale is not the objective of the marketing process – it’s the beginning of a lifetime customer relationship (1995, Griffin, p 38).

In many businesses the customers most likely to sign on are precisely the worst customers you could possibly find. In Griffin's list, these are the disqualified prospects, or at least they are the ones that should be. This phenomenon is known as adverse selection (1996, Reichheld, p 76). Yet companies often create business systems and goals that directly or inadvertently attract this type of customer. Coupons, sales promotions, employee awards based on new customer sign ups, etc. can all be ways of enforcing adverse selection, as can be poorly managing and targeted marketing campaigns.

Frederick Reichheld in a Harvard Business Review (HBR) article published in late 2003 indirectly adds one other customer stage, that of **Detractor.** Detractors are past customers that no longer do business with a firm and will typically go out of their way to spread ill will and free advice to anyone who will listen about how horrid a company is or how bad their experience with a company was. A company's poor performance can illustrate the detrimental effects that detractors' communications can have on a business (Reichheld, 2003, p 53). These communications destroy the good will created by advocates in a network of referral. They also can lead to large amounts of money being spent on increasingly failing advertising and marketing campaigns.

Mr. Reichheld also points out in the same article that 'the only path to profitable growth may lie in a company's ability to get its loyal customers to become, in effect, its marketing department.' (Reichheld, 2003, p 51). This is the same as the Advocate in the seven levels of a customer previously noted. These advocates will go out of their way to personally recommend a companies products or services to their family, friends and acquaintances. Through a method similar to the one used in computer science called Metcalf's Law, the value of such a network grows exponentially to the number of nodes (or in this case advocates) in the referral network.

In this HBR article, Mr. Reichheld and his associates lay out the results of years of research into customer feedback and how the answers companies receive, relate to the real reality of that customer's future behavior. This research

shows that across a wide range of businesses and markets a simple equation from an even simpler question can be a powerful predictor of future growth. The equation is:

Advocates – Detractors = Net Advocate/Detractors

Where a positive answer means the company has more promoters than detractors and can therefore expect continued growth. A negative number means the business has more detractors than promoters and can, therefore, expect a business base contraction and a loss of good employees and long term, repeat customers.

The simple question that finds advocates is “Overall, how likely are you to provide enthusiastic referrals for Company X?” The research indicates that answers of 8 or higher denotes an advocate, while any number less than 8 should be considered a detractor to the sake of the calculation. Mediocre and average respondents in the middle do no more to create new customers and positive influences than do an active detractor.

For established businesses one of the best ways to get a handle on the ‘loyalty effect’ and to quantify customers is to first survey those existing customers and classify and quantify the results (Griffin, 1995, p 209) (Reichheld, 2001, p 4) (Kaplan, 1996, p 70). Establishing a baseline will allow the company to better understand their current place in the market as seen from their customer’s perspective and begin to establish controls and mechanisms for avoiding adverse selection, while building better customer relationships.

Normal accounting techniques employed under Generally Accepted Accounting Principles (GAAP) do not force a company to value or necessarily quantify the value of its customer base, and this type of measurement does not show up as an asset on a balance sheet. Yet, a loyal following of repeat and happy customers is quite possibly one of THE most important assets a company has.

The ultimate goal, as customers ascend through the seven levels of Griffin's model, is to build and measure a business system that promotes as many customers to advocate as possible, while minimizing detractors. The attributes that define a company's value proposition can then be honed, targeted and employed in attracting new customers. They can also be used in setting employee and company wide goals for providing outstanding service to existing customers.

The tenants of customer loyalty described in this section marry nicely with that of the environment of SPAWAR Charleston discussed in the pervious chapter. The focus of such measurement is on measuring the perceived value of a relationship from the customer's perspective, focusing on retention and building of long term mutual relationships and looking for ways to increasingly add advocates to the businesses ranks of customers.

No where do these methods focus on items that SPAWAR Charleston has no motive for (i.e. profit), nor do they violate any of the laws, regulations and operating procedures present in the government organization. One could further argue that since in the internal government marketplace there is little to any avenue for mass marketing or product advertising, this word of mouth from current and past customers may be even more important to an organization like SPAWAR Charleston. Likewise, building a loyalty business based on integrity and best value is the basis for a WCF activity as codified in law.

C. EMPLOYEE LOYALTY

The first focus of building a loyalty based business is the focus on providing outstanding value to the customer. The second, but no less important, focus area is on that of loyal and happy employees. Having the right employees has everything to do with keeping the right customer. Employees that are not loyal are not likely to build relationships with customers whom are loyal (Reichheld, 1996, p. 91). This would seem to be especially true in service

related industries where there is a substantial amount of customer interaction, such as SPAWAR Charleston.

Frederick Reichheld notes the following quote by the management guru Peter Drucker (Reichheld, 1996, p. 92):

> All organizations now say routinely, "People are our greatest asset." Yet few practice what they preach, let alone truly believe it. Most still believe, though perhaps not consciously, what nineteenth-century employers believed: people need us more than we need them. But, in fact, organizations have to market membership as much as they market products and services – and perhaps more. They have to attract people, motivate people, and serve and satisfy people.
>
> --- *Peter Drucker, Harvard Business Review "The New Society of Organizations" September – October 1992*

The fact that some companies now actively market employment as a form of membership can be seen today as evidence that some have started to reverse this trend.

These companies pay less attention to salary caps, layoffs to cut labor costs, etc. and focus instead on employee development and creating more and more value for increasing numbers of customers. Many claim that a business can only be low cost or high service, but many companies have shown that by building a loyalty based business, they can deliver both superior service and remarkably low costs (Reichheld, 2001, p.33). These businesses focus on attracting and retaining the best employees. These employees in turn earn their way to increased rewards as they attract and hold on to loyal customers faster than their individual costs to the company rise.

Jill Griffin also outlines a new employee model built by Harvard Professors Leonard Schlesigner and James Heskett (Griffin, 1995, p 114):

- Value investments in people more than ones in machines

- Use technology to support front line employees, not monitor or replace them
- Make recruiting for all individuals as critical as screening for a new CEO
- Link compensation to performance for employees at every level

Measuring employee contribution to annual income turns out to be similar to measuring customer contribution to profits over time as an annuity, as discussed in the previous customer section. There is typically a sunk cost to recruit, train and ready new employees to take on tasks in a company. Only over some future time frame can an employee earn enough share of profit to pay back the expense of training them. Just like customers, employees have an attrition rate. If a company loses 2 out of every 3 new hires in 3 years, but it takes 3 years for any one of them to pay back the initial outlay to train them, then the 1 remaining employee and/or the rest of the organization has to make more individually to make up for the defectors (Reichheld, 1996, p 105).

Care should be given in classifying the defectors in a meaningful way. Not all defections are created equal. If an employee leaves due to a family consideration vice leaving to work for a competitor, then these are clearly not equal. However, even if people leave for an entirely different line of work, this should be treated as a serious problem. When people do not like their jobs, any number of areas in the company may need to be improved from recruiting to management (Reichheld, 1996, p 99). A good measurement system tracks these defections and helps management to make better investments to increase retention and attract the right type of employee.

Likewise, a good system is not tolerant of ‘dead wood’ - employees who are not increasing their productivity rapidly enough to pay for their share of costs. Holding on to these employees destroys value over time. The system in place has to be able to find these people and help them up the system or possibly even out of it to other jobs. This is one of the key tenants of linking performance to pay listed at the end of the ‘new employee model’ discussed above.

Happy and successful employees find new and innovative ways to service new and existing customers, thereby increasing productivity. This is especially important with repeat customers who build a relationship with a firm's particular employees. This relationship allows the employee to respond to their needs more quickly than to the needs of a new customer. This increase in productivity follows a similar pattern to the learning curve theory taught in many production and manufacturing programs, but here the learning curve is individual instead of across an automated assembly line (Reichheld, 1996, p. 122).

This productivity increase has profound impacts on revenue and customer satisfaction. It allows employees to reduce costs and improve quality, and to use the time from the extra productivity to fund better tools and training (Reichheld, 1996, p 21). It may also allow the more experienced employees to spend more on-the-job time with new hires as they learn the ropes of the business.

The SPAWAR Charleston business and compensation systems are capable of being used in this fashion to increase employee loyalty and increase productivity to a certain extent. Employees are rewarded in increased pay or one time bonuses based on past year performance of objectives set by the employee and his or her supervisor. Likewise, employees who do not perform to an acceptable level, so called 'dead wood', move backwards or ultimately out of the company as discussed in the previous chapter on the compensation system in use at SPAWAR Charleston.

There are a few constraints to how far this can be taken however, given the limits of the current system in place at SPAWAR Charleston. Employees still earn the majority of their compensation through salary. This seems to stand in contradiction to many loyalty leaders who offer a small base salary and then compute the rest of employees pay based on contribution to profits. However, this would be difficult to do in SPAWAR Charleston however, since it does not have a profit motive. One potential way is to create a culture that values promotions to certain types of positions as a type of "pay in respect to peers" vice that of direct compensation.

This runs into its own set of problems in the current semi-bureaucratic model or hierarchy that is employed at SPAWAR Charleston. The SAPWAR Charleston organization, like most government and older corporations, closely follow what German sociologist Max Weber called the “rational-legal” bureaucracy” (Ancona, 1999, p 1-5). There are many aspects to this definition, but the main implication to focus on here is that the primary route to prestige and higher compensation is to move past the terminal line position to a staff job. However, the impact of these staff positions can not be precisely defined as value or profit to the company (Reichheld, 1996, p 144).

These staff positions tend to write numerous operating rules, policies and other requirements that typically add to the bureaucracy and that destroy the entrepreneurial capability of the lower profit centers and their teams to quickly react to their customers. Frederick Reichheld states in his book about the fact that organizations like this have a terminal position in the chief executive, “Only one person at a time can hold the job, and 99.99 percent of the rest will fail to achieve their ambition. The counterproductive behavior this creates in the form of politics and personal disappointment is enormous.”

Instead of striving for a staff position or a job at headquarters in a bureaucratic business, loyalty companies find ways to keep their best and brightest employees close to their customers and to compensate them for doing so. These companies have embraced new business structures that are networked, flat, flexible, diverse and global (Ancona, 1999, p 8).

These businesses realize that the return on investment and the gross return of these employees on the edges or the business are what grow the business, not those in the middle of the hub. They work and talk with customer’s everyday. Organizations need to respond more rapidly and more flexibly to changes in their markets and technology, and to engage their people in continuous improvement of operations, and therefore to eliminate the delays caused by a tall, control-oriented hierarchy (Anacona, 1998, p 9). They are the first to be in a position to detect shifts and changes in customer’s wants and

needs and they need to be given the tools to have open and honest dialogues with these customers so that they can better react to these changes.

This does not mean that each team should be an island unto itself and that staff positions are not required. Quite the contrary is true. The core is what establishes the business philosophy, sets the tone and markets for the company and builds and instills the culture throughout the organization. Day to day operations are left to the edges while the core works on tuning the business model that allows the entire organization to be successful.

Likewise, to be successful in this business model companies have to establish the correct metrics to measure employee retention, productivity and loyalty and their perception of a company's culture. This has been true in manufacturing since the discovery of the learning curve, and it appears to be no less true today in the information age. Management philosophies such as 'The Balanced Scorecard' by Robert S. Kaplan and David P. Norton advocate the need to build a baseline of metrics today to get a handle on current employee sentiment and be able to establish a baseline for better employee performance metrics in the future.

One method for doing that is to survey current employees on their thoughts and feelings towards their employer, their current work environment and their current satisfaction with the job they are doing. The prime areas of measurement are to establish how strong the sense of closeness and faith to the organization and its mission are and to begin to gauge and measure retention. It also should focus on how and if employees perceive barriers that, if removed, could dramatically improve customer retention at the same time.

The goal is to have a highly talented, happy, motivated and agile workforce who feels empowered to help their company, team and customer to acquire the best information and make the best decisions in order to increase the value of the on going relationship. From the business environment discussion in the previous chapter there does not appear to be any reason why such a measurement would not be effective at SPAWAR Charleston.

The company has the preponderance of its employees in direct contact with customers who themselves are in a quickly changing and fluid marketplace. Assessment of employee feelings with respect to how they perceive their relationship to the company and the value that the company can provide to customers, is tantamount then to future growth and happy customers.

D. CONSTRUCTION OF ASSESSMENT METHOD FROM LITERATURE

The two surveys for this assessment method are largely based on the work of Frederick Reichheld and Satmetrix Systems Incorporated. The instruments in question have been developed across a wide range of industries and business models. The original, unmodified survey formats are available on the web for free use at www.loyaltyrules.com, as well as a sampling of industry wide comparison metrics from some of the questions from the survey. Further data is available for a price from Satmetrix Systems, but the authors acknowledge that these proven formats collect useful data even without the benchmark comparison to other industries.

The questions on both surveys are linked to six broad areas defined by Mr. Reichheld in his book "Loyalty Rules: How Today's Leaders Build Lasting Relationships". The six principles tie directly to building a loyalty based business in line with the previous discussions, and these topical items are not necessarily specific to this text. Many of the tenants appear in any other number of management texts, and each one in itself could be the topic of several books. The six areas are:

1. **Play to win/win** – Strive to create environments where everyone involved, customers, employees and investors win. Profiting at any one person's expense is a shortcut to a dead end. (Reichheld, 2001, p 43). This is the basis of creating exceptional value.
2. **Be picky** – Membership is a privilege: strive only to cultivate business relationships when both sides can provide value. Do so not from

arrogance, but from realizing you can not be everything to everybody (Reichheld, 2001, p 73).

3. **Keep it simple** – Cumbersome business models do little to create low barriers of entry for repeat customers and they destroy culture by making it difficult to deliver value to customers by employees (Reichheld, 2001, p 97).
4. **Reward the right results** – "Align performance with targets so that partners reach for the stars – not each others pockets. Share value generously with partners responsible for its creation. Help everyone stretch to his or her full potential, taking special care that star performers are rewarded with additional opportunity to grow and develop. Let no one confuse value with profits, nor loyalty with obedience and tenure." (Reichheld, 2001, p 121)
5. **Listen hard, talk straight** – Trust defines a loyalty business, and to build and gain trust requires open and honest two way dialog. Cutting edge communications tools and listening skills are essential (Reichheld, 2001, p 149).
6. **Preach what you practice** – Actions speak louder than words, but it takes both to be truly effective. Find your principles, instill them in your business philosophy, and share them in words and actions (Reichheld, 2001, p 173).

The employee survey is composed of fifteen core questions and six classification questions. Of the fifteen core questions, twelve are directly tied to the six areas named above, or two questions for each one of the six tenants of a loyalty business. The employee is asked to rate their agreement with each statement on a scale of 1 to 10, with 10 being 'Completely Agree' with the statement and 1 being 'Completely Disagree' with the statement.

The six classification questions are designed to help subdivide the data into comparable groups during analysis. For instance, the survey asks where

geographically a particular employee is located. His or her results if they are at a remote office may be markedly different than an employee at the headquarters. This may signal a break down in communications, opportunities or other problems with remote employees. There is also a comment space for employees to make comments on an area they think if improved would increase their loyalty. A copy of the employee survey is in Appendix B.

The customer survey is divided into three sections. The first section has four general questions that are measured on a 5 point scale. The measurements from these questions are designed to allow for better predicted customer retention metrics based on customer wants and their desire to continue doing business with SPAWAR Charleston.

The second section contains thirteen questions. Twelve of these thirteen questions are again linked directly to the six tenets above, but this time measured from the customer's perception. The thirteenth is another gauge of overall customer loyalty and predictor of retention. The same 1 to 10 point rating scale is used for all thirteen questions.

The last section of the employee survey is a single classification question designed to help establish how long each customer has done business with SPAWAR Charleston. This will allow groups of similar tenure to be compared to one another. This section also includes a space for customers to share one specific area that if improved on the part of SPAWAR Charleston, would improve the customer's loyalty as well.

The core questions in each survey have been tested by Mr. Reichheld and Satmetrix Systems Inc. by administration to thousands of customers in six industries: financial services, cable and telephony, personal computers, e-commerce, auto insurance and Internet service providers (Reichheld, 2003, p 50). The study then directly linked survey responses from individuals directly to actual behavior. The information was used to statistically prove that one question was the best for most industries: "How likely is it that you would recommend [company X] to a friend or colleague?" After establishing this fact,

Satmetrix went on to show that this holds true in 400 other companies and their respective industries save two specific situations.

The first situation is where the end user surveyed was not the person who made the actual purchase decision. This was taken into account for this application by targeting as customers the individuals who had the purchase authority to enter into a business relationship with SPAWAR Charleston vice the typical end user of SPAWAR Charleston products, who is removed from this decision. The second situation was where there was a monopoly in a certain business segment. SPAWAR Charleston does not enjoy such a relationship with its current and potential customers and as such this should not be a factor for this application.

E. METHOD

Fifteen customers were identified using the guidelines that a customer is defined as 'individuals who had the purchase authority to enter into a business relationship with SPAWAR Charleston.' These fifteen customers were electronically sent copies of the customer questionnaire shown in Appendix C. Customer response rate was 67%, or 10 of the 15 surveys were returned. The customers were requested to print the form and fax it back to a number provided if they desired anonymity. Several e-mailed their responses back stating they had little problem with being associated with their comments, but this data was not provided to anyone at this time.

The employee survey was electronically sent by the Code 61 Division head to all employees in the Division for completion and return in a five day window. The 61 Division covers 102 employees, of which 7 were removed from the distribution since their positions were not as direct employees (i.e. military personnel), cross coded from a different group (2 employees) or the author of this thesis. Employees were provided a copy of the questionnaire shown in Appendix B. The employee response rate was 67%.

Once the window for survey returns closed, the survey results were compiled in Microsoft Excel and then tabulated by building a set of graphs and metrics for each division area in the second part of each survey (i.e. by age group, tenure length, etc.). A set of graphs counting frequency of each response, calculating the most frequent response and also calculating the mean of each response were built and analyzed for trends and patterns. These results are discussed in depth in the next chapter.

F. CHAPTER SUMMARY

The focus of this chapter is to describe the meanings and the basis for constructing a loyalty business model. Two of the three key areas of a business, employees and customers, were discussed in depth. The third area not discussed in that of investors. No easy survey method exists for this part of the loyalty model exists, so this area is left for future exploration.

The chapter shows where the source of the assessment tool came from, gives some background on the validity and demonstrated capability of the model and discusses its applicability to SPAWAR Charleston. The survey method, analysis methods and the overall response rate of the survey is also discussed.

IV. RESEARCH ANALYSIS

A. INTRODUCTION

This section provides the analysis of the survey results for the employee and customers of the Command and Control Systems Division Code 61 at Space and Naval Warfare (SPAWAR) Systems Center Charleston (SPAWAR Charleston). This section includes a discussion of the results, data visualizations of pertinent data, application of the analysis to the research questions and a summary.

The survey results provide a substantial amount of data. This is particularly true of the employee survey, where more factors to categorize and analyze the data are available. The data was collected, sorted and graphed using Microsoft Excel. For each grouping of employee data three charts types were created:

- Frequency chart – gives the number of responses to each possible answer for each question, sub-grouped into 3 ranges of 8 and higher, 5 to 7, and less than 5. These ranges were chosen to reduce the data to a more manageable graph. For this analysis an 8 and above is considered good, a 5 to 7 is considered marginal and less than 5 is considered poor.
- Mode chart – shows the most frequent response for each questionnaire category by question
- Mean chart – gives the average of each questionnaire category by question

Results for the customer data are assembled in a frequency chart. No ranging or grouping has been performed. The customer survey had only one category, that of length of the business relationship with SPAWAR Charleston.

B. FINDINGS FOR EMPLOYEES

1. Grouped by Service Length

The first category question on the questionnaire is response by 'Service Length'. The goal of this category is to see if and how trends in employee feelings towards their work might change and vary with the amount of time they had been employed by SPAWAR Charleston. Appendix D shows all the graphs for this analysis section.

The data shows some positive and negative trends. On the positive side, regardless of tenure length, the Division shows a fairly high predicted retention rate. However, 15 people out of 63 respondents (23%) did not know if they would be working for SPAWAR Charleston in 2 years. Less than half of those 15 gave a response of less than 5, indicating a high probability of leaving.

Another positive aspect is that new employees and employees of less than 3 years service appear to be generally happy with their job, their supervisor relationship and are likely to provide recommendations to others about SPAWAR Charleston as exhibited in the responses to questions 1 through 3 in Figures 2 and 3. These questions on the questionnaire were:

1. How likely are you to be working for SPAWAR Charleston two years from now?
2. Overall, how satisfied are you with your relationship with your immediate manager?
3. Overall, how likely are you to provide enthusiastic referrals for SPAWAR Charleston?

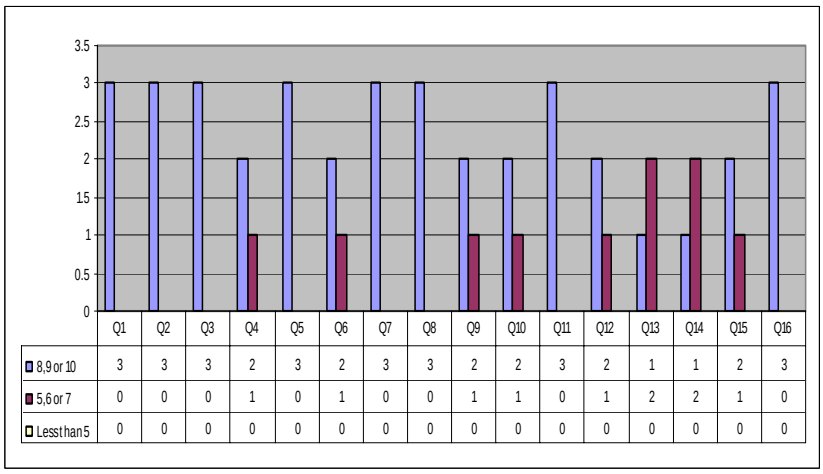


Figure 2. Employee Response By Service Length - Less Than 1 Year

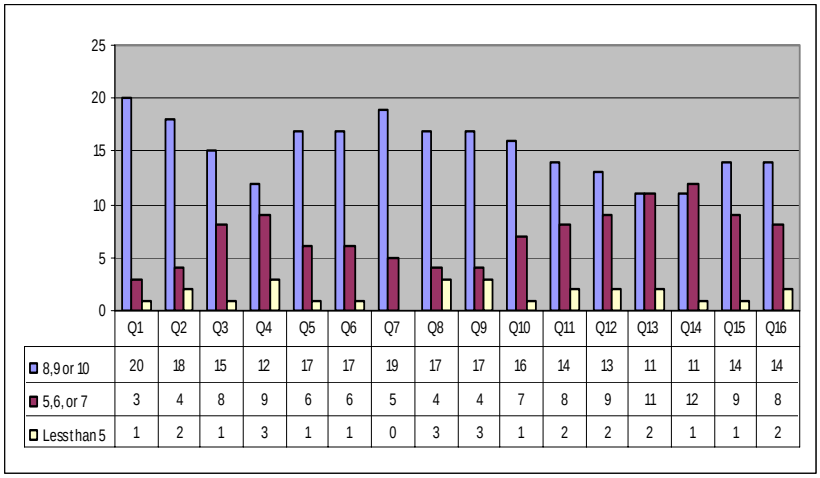


Figure 3. Employee Response By Service Length - 1-3 Years

The results to questions 10 through 15 in Figures 1 through 6 show one negative trend that ranges across all service lengths. That negative trend is in

being able to articulate the SPAWAR Charleston business philosophy, capability and the Command's overall competitive advantage. These questions are:

10. SPAWAR Charleston values people and relationships ahead of short term profits or gains

11. We make is easy for our customers to do business with us

12. This company sets the standards for excellence in our industry

13. The company has a winning strategy (superior economics in servings its customers)

14. The company attracts and retains outstanding people (employees, partners, etc.)

15. Company creates innovative solutions that makes our customers lives easier

Further analysis shows this trend also turns up in most of the other category areas as well. This data may show that many feel the Command, as a whole, lacks focus and a vision of where it is headed and what competitive business advantage it has.

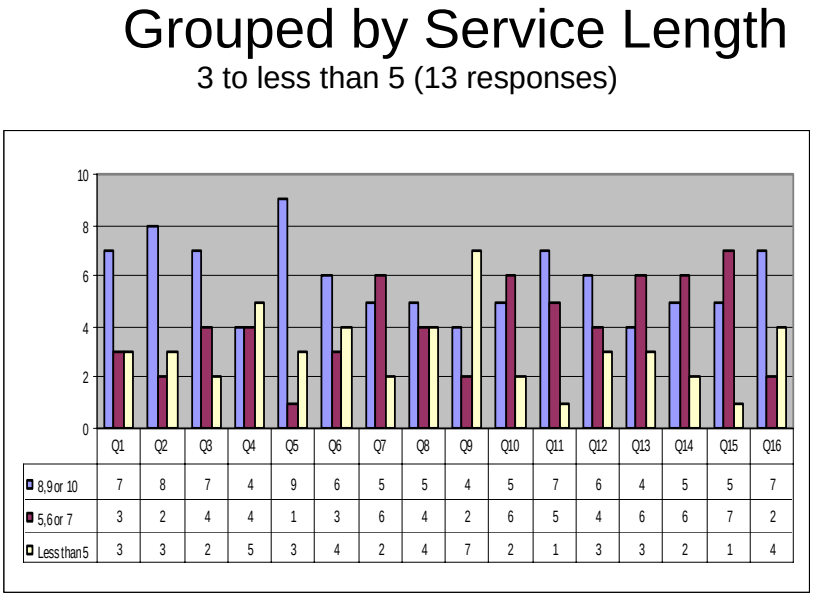


Figure 4. Employee Response by Service Length 3 to Less Than 5

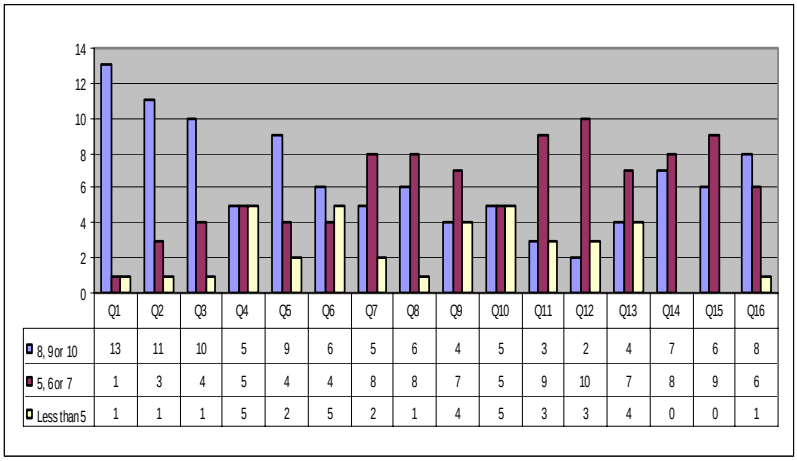


Figure 5. Employee Response by Service Length 5 to Less Than 10

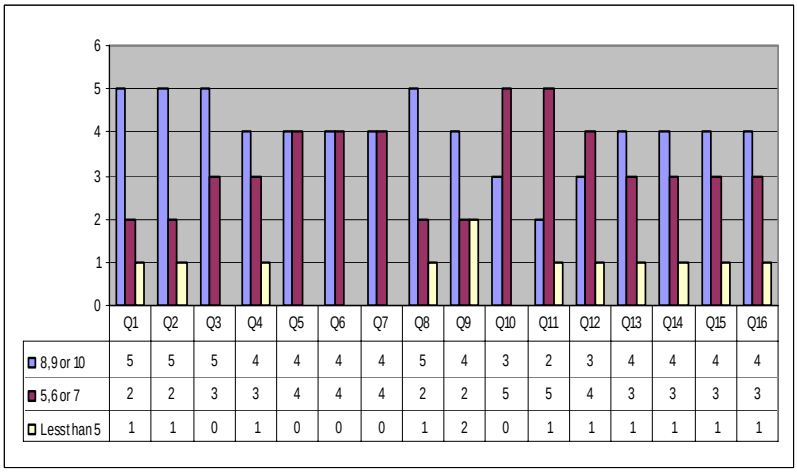


Figure 6. Employee Response by Service Length 10 or More

An additional area of concern begins to show markedly at later lengths of tenure, but can be spotted starting at as little as 3 years of service. This negative trend is that the Command does not communicate openly and honestly and that

these groups have lost faith and trust in the leaders and their work peers as exhibited by an increasing number of low ratings for questions 4 through 7 and question 16.

4. The company communicates openly and honestly

5. The company is committed to win/win solutions (does not take advantage of its partners/customers)

6. I trust SPAWAR Charleston's leaders and employees to behave with fairness and integrity

7. Customer loyalty is appropriately rewarded and valued at SPAWAR Charleston

16. I feel I am an active and respected part of the team at SPAWAR Charleston

This data corroborates data from the question regarding the 'single biggest improvement the Command could make to improve loyalty'. The feelings of poor communication are by far the single largest request for overall improvement.

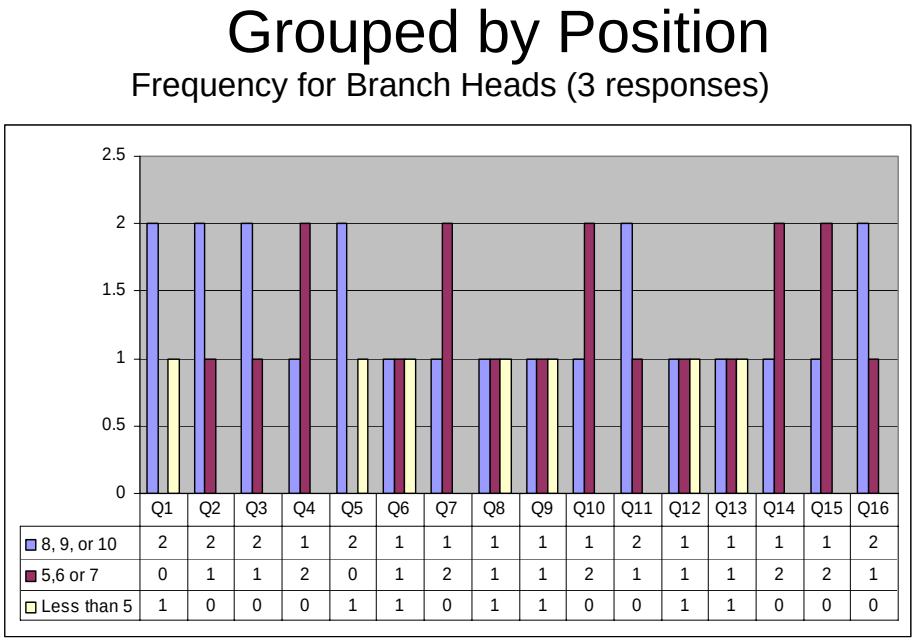
Finally, employees in the 3-10 year service lengths have experienced no change or a negative change in their loyalty to the Command. This last fact is seen is Figures 4 and 5 in the response to question 9, which asks:

9. Over the past year, my loyalty to SPAWAR Charleston has grown stronger

2. Grouped by Position

The second category area is 'by position'. The goal of this category is to see if a person's position in the organization had any dramatic affect on their thoughts. Appendix E shows all of the graphs for this category. The category was divided into three major areas in the Division: Branch Head, Division Staff and regular line employees.

Normally the number of branch heads in the current organization would be six; however for the last year three of those positions have been vacant with only acting branch heads serving in the position. The three actual branch head's responses are quite mixed as seen in Figure 7. Overall the group has fairly positive retention prospects (question 1) and felt that the Command does a decent job in making it easy to do business with us (question 11).



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8, 9, or 10	2	2	2	1	2	1	1	1	1	1	2	1	1	1	1	2
5,6 or 7	0	1	1	2	0	1	2	1	1	2	1	1	1	2	2	1
Less than 5	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0

Figure 7. Employee Response by Position – Branch Head

However, this group of front line supervisors had several areas of difficulty and frustration. Most interesting is the area of business objectives, capabilities and goals of the organization which shows mixed results again for questions 10 through 15. The group also evenly splits the loyalty earning and growth questions (questions 8 and 9), and overall is neutral on the level of open and honest communication (questions 4).

In general, the 61 Staff positions show very positive trends in almost all areas save the business objective areas of questions 10 through 15 as seen in Figure 8. Here this group again exhibits very neutral comments to these

questions. These individuals have a high predicted retention (question 1) and are generally happy with their supervisors and peers (questions 2, 6 and 14).

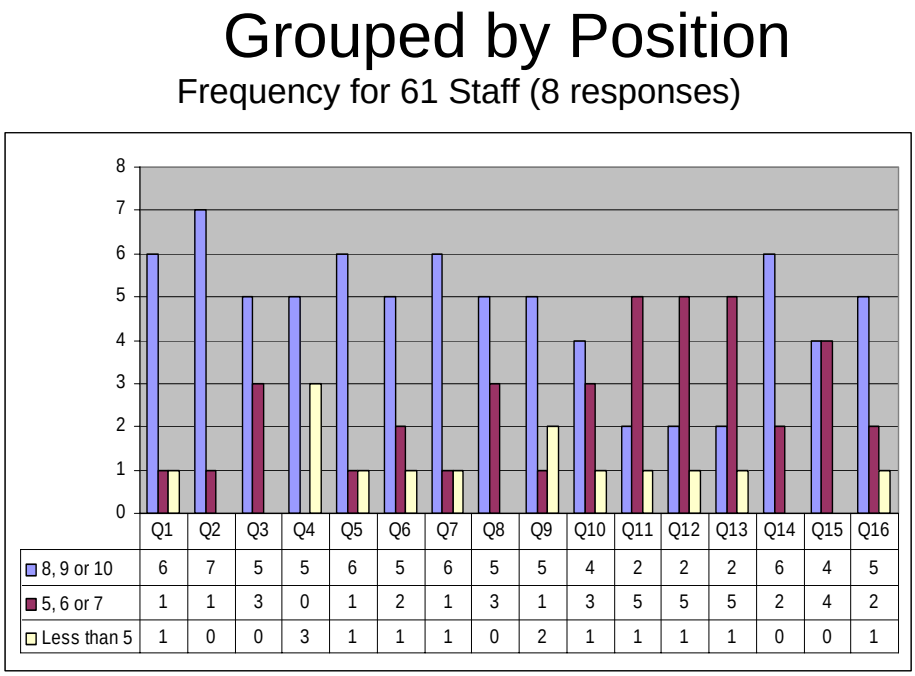
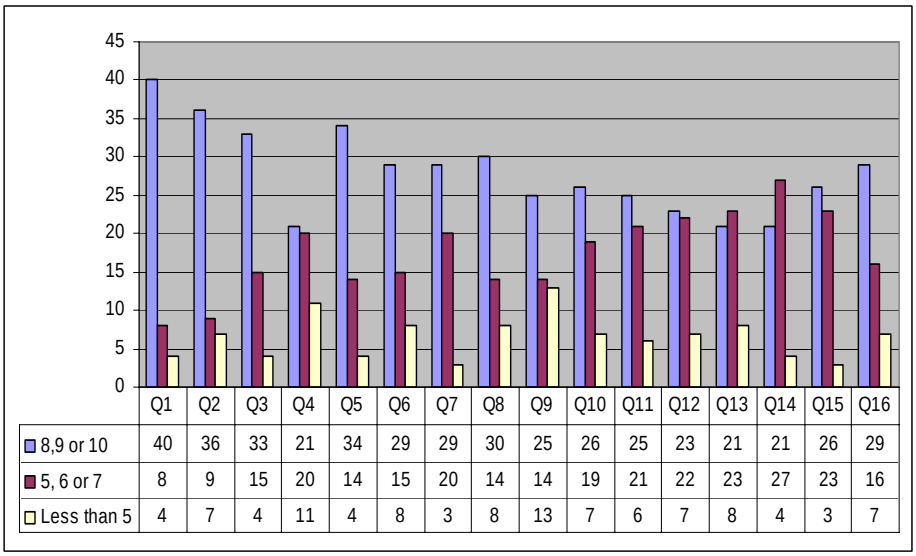


Figure 8. Employee Response by Position – 61 Staff

The line employees overall have a high predicted retention rate (question 1), are generally happy with their supervisors (question 2) and are the most apt of the three groups to provide referrals to others about SPAWAR Charleston (question 3) as seen in Figure 9. The group is mixed on open and honest communication (question 4) and also has a hard time with the business philosophy and goals (questions 10 through 15).

If should also be noted that at first glance this graph looks very positive, with a response rate in the highest mark in many of the responses. However, under closer analysis addition of the response totals for the ranges '5, 6 and 7' and '5 and below' and comparison to the response total for the first range shows a significant finding. This comparison shows that the answers to questions 4, 6, 7, 9, 10, 12, 13, 14, 15 and 16 are split almost fifty-fifty.



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	40	36	33	21	34	29	29	30	25	26	25	23	21	21	26	29
5, 6 or 7	8	9	15	20	14	15	20	14	14	19	21	22	23	27	23	16
Less than 5	4	7	4	11	4	8	3	8	13	7	6	7	8	4	3	7

Figure 9. Employee Response by Position – Salaried Positions

3. Grouped by Group Size

The third category is sorted by 'Group Size' or the number of people in a group under the same supervisor. The Command has had a long standing debate over the appropriate size of a branch and the effective span of control of one supervisor. This category is aimed at analyzing if there is any strong correlation in the collected data to corroborate this claim. Charts of each area are in Appendix F.

The specific answers to the question here are no different than those in the previous two categories. However, the majority of the groups reporting to the same supervisor, particularly for the branches, range in the areas of 5 to 20 employees. Three surveyed groups fall outside this 'normal' range of 5 to 20 with two groups of less than 5 employees and the one group with 20 or more employees. The data shows that these three groups in actuality have the fewest employees with low scores on the survey, especially in the areas relating to their supervisor and loyalty. These findings show a very weak correlation then to the statement that branches of less than 15 people and more than 7 are best and

that it is possible for large branches to be generally happy. This does not indicate the branch head of these large groups response however, and it is quite possible that these individual(s) may in fact feel overwhelmed.

4. Grouped by Location

The purpose of category number 4 is to determine if working location and proximity to the main building have any bearing on employee responses. This area proves not to have enough responses to perform an adequate analysis. Well over 90% of the responses are from the main Charleston location. This would not be the case if the total response rate were higher than 67%, since much of the remaining 30+% are distant employees not located in Charleston. It is recommended that this question be retained in future versions of the questionnaire.

5. Grouped by Age Range

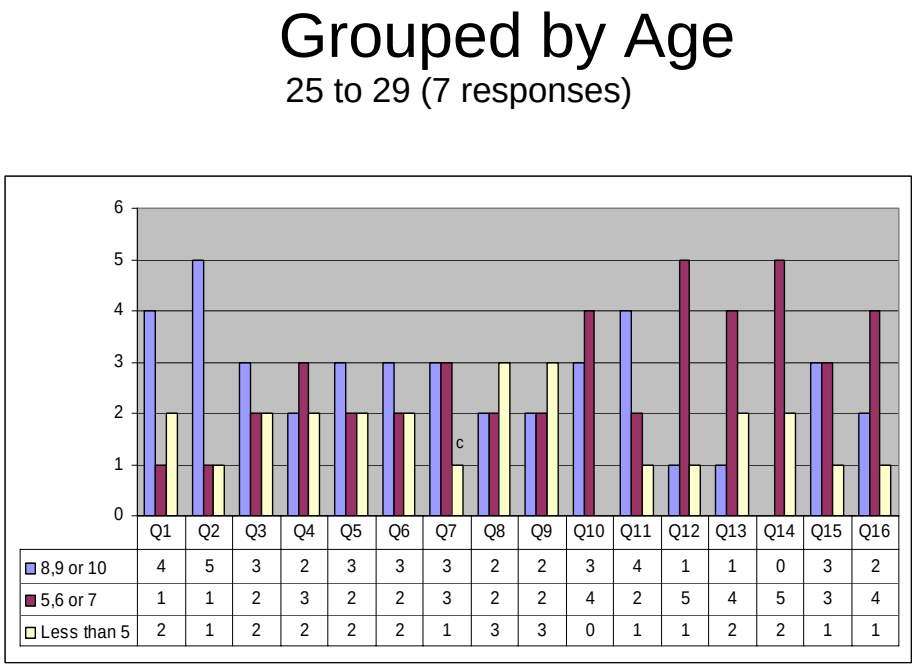
The final employee category is by age range. Similar to tenure, this category is intended to find if there are any specific findings related to a person's age range, and therefore, to their relative position in their personal life. The graph results are in Appendix G.

The graphs show another set of interesting results. The first group to move towards a majority of answers in the middle to lower part of the scale are employees in the 25-29 year old range (Figure 10). Interestingly, this trend reverses itself in the responses to questions 3 through 10 in the very next age group of 30-34 year olds (Figure 11). Over the reminder of the age range these questions then slowly move to the middle to lower areas on average again.

There are a couple of potential reasons for this shift. One could be due to the employees in the 25-29 year old age range coming up on their first potential 'job transition'. They have potentially been with SPAWAR long enough to gain some experience and resume length, and are ready for a new challenge or job change. The Command would have to find a way to better challenge and

engage these employees to maintain retention. This may include job transfers to other potentially exciting jobs or increased responsibility on a current assignment.

A second possible reason is that the new employee gets to SPAWAR Charleston soon after starting their new job to find that in fact it is not a very good fit. They are not doing what they were told they would be or maybe not doing what they expected. Either way, the recruiting and hiring process failed both the employee and the employer by not better communicating job descriptions, assignments or pay.

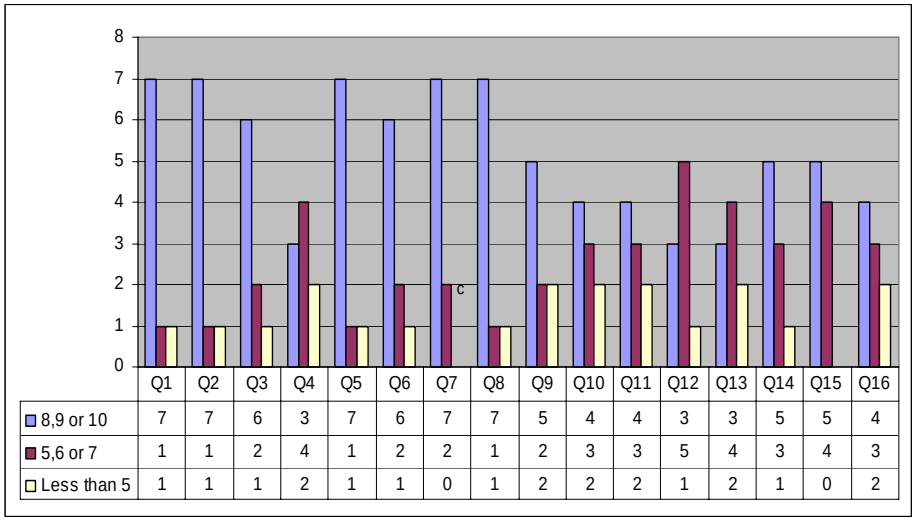


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	4	5	3	2	3	3	3	2	2	3	4	1	1	0	3	2
5,6 or 7	1	1	2	3	2	2	3	2	2	4	2	5	4	5	3	4
Less than 5	2	1	2	2	2	2	1	3	3	0	1	1	2	2	1	1

Figure 10. Employee Response by Age Range – 25 to 29

Grouped by Age

30 to 34 (9 responses)



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	7	7	6	3	7	6	7	7	5	4	4	3	3	5	5	4
5,6 or 7	1	1	2	4	1	2	2	1	2	3	3	5	4	3	4	3
Less than 5	1	1	1	2	1	1	0	1	2	2	2	1	2	1	0	2

Figure 11. Employee Response by Age Range – 30 to 34

The other significant area of results is in the 45-49 year old category. This age range exhibits a large number of neutral responses to questions 10 through 15 and a large number of employees with negative growth in their loyalty to the Command in questions 8 and 9 (Figure 12). This could be a particularly disturbing finding, since these employees are most likely in high visibility positions as project or team leaders, supervisors, and/or mentors to younger employees.

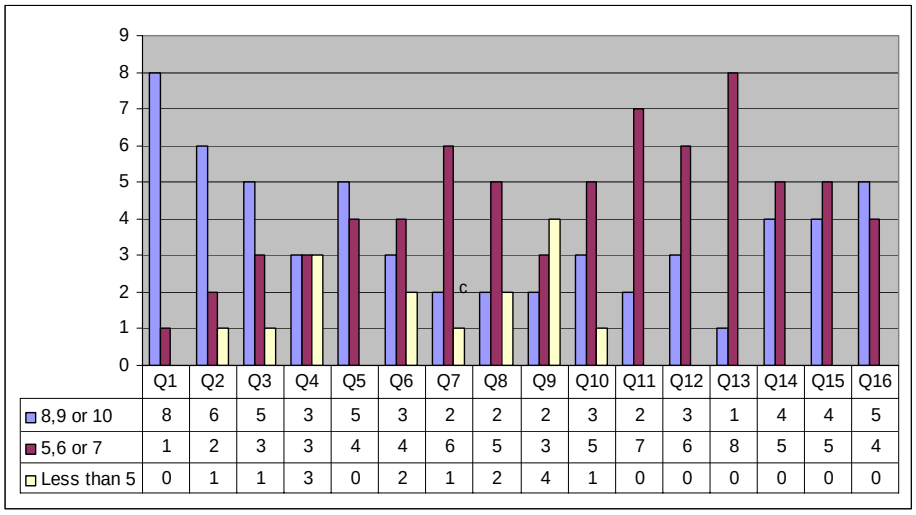
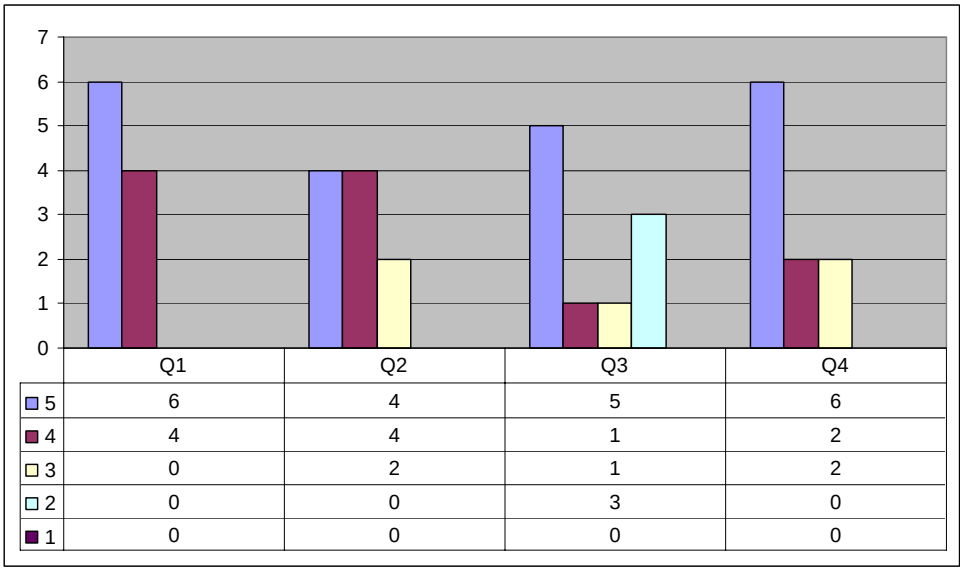


Figure 12. Employee Response by Age Range – 45 to 49

C. FINDINGS FOR CUSTOMERS

1. Customer Results Overall

The first section of the survey contains four questions that ask the customer's feelings about SPAWAR Charleston. Responses are on a 5 point scale, with 1 being associated with the lowest response and 5 the highest. The data is shown in Figure 13 below.



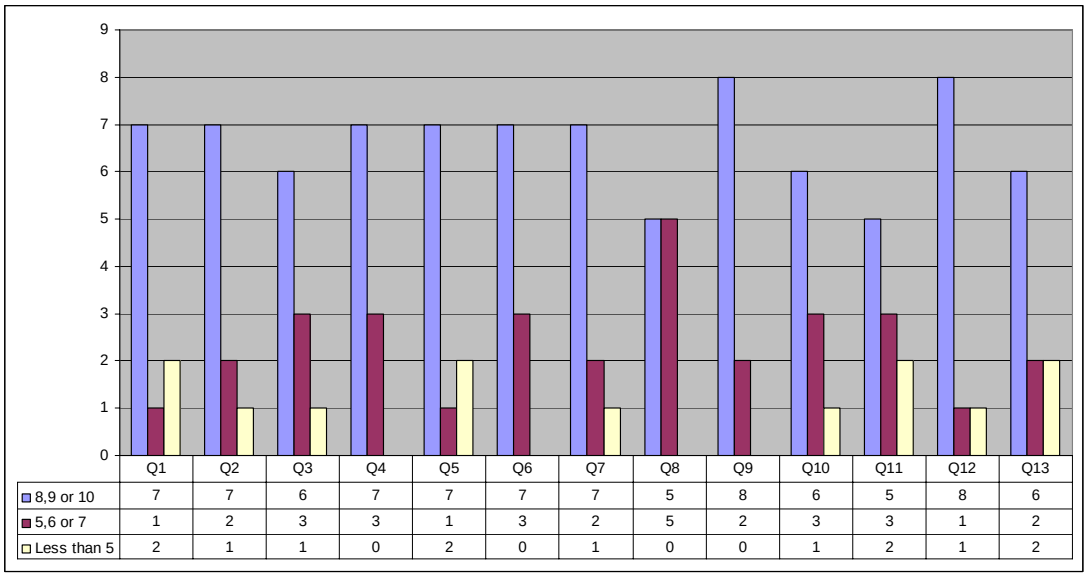
	Q1	Q2	Q3	Q4
5	6	4	5	6
4	4	4	1	2
3	0	2	1	2
2	0	0	3	0
1	0	0	0	0

Figure 13. Customer Responses to First Section

As a composite group, the customers overall seem to be happy with their feelings towards SPAWAR Charleston. The customers surveyed seem to be likely to continue to buy products and services from Charleston (question 1, retention), are likely to provide good referrals (question 2, referral) and overall seem to be satisfied (question 4).

The major area of concern from the data collected is question 3. This question asks the respondent how much it would matter if they could not continue to do business with SPAWAR Charleston. This question had the highest number of aggregate responses below a 4.

The second section of the survey contains 13 questions similar to the questions on the employee survey. These Reponses are on a 10 point scale, with 10 being the highest and 1 the lowest. The data is shown in Figure 14 below.



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
8,9 or 10	7	7	6	7	7	7	7	5	8	6	5	8	6
5,6 or 7	1	2	3	3	1	3	2	5	2	3	3	1	2
Less than 5	2	1	1	0	2	0	1	0	0	1	2	1	2

Figure 14. Customer Responses Second Section

As a whole, the customer responses are positive on questions 1, 2, 4, 5, 6, 7 and 12. These questions are as follows:

1. SPAWAR Charleston really cares about building relationships with me
2. SPAWAR Charleston communicates openly and honestly
4. I trust SPAWAR Charleston's leaders and employees to behave with with fairness and integrity
5. Customer loyalty is appropriately rewarded and valued at SPAWAR Charleston
6. I believe that SPAWAR Charleston has earned my loyalty
7. Over the past year, my loyalty to SPAWAR Charleston has grown stronger
12. SPAWAR Charleston attracts and retains outstanding people

No question has an outright negative response, but the remaining questions either border on or are over a response total of more than 50% not giving the highest marks of an 8 or better. These questions are 3, 8, 9, 10, 11 and 13. These questions are:

3. SPAWAR Charleston is committed to win/win solutions

8. SPAWAR Charleston values people and relationships ahead of short term profits or gains

9. SPAWAR Charleston makes it easy for me to do business with them

10. SPAWAR Charleston stands for excellence in the industry

11. SPAWAR Charleston has a winning strategy

13. SPAWAR Charleston creates innovative solutions that make my life easier.

2. Customer Results by Relationship Length

The only categorization available for the customer data is by length of relationship. All of the graphs for this analysis are located in Appendix H.

No discernible pattern is detectable in this analysis by length of relationship. Out of ten respondents, 2 have less than 3 years of relationship, 4 have 3 to 5 years, 3 have 5 to 10 and only 1 has longer than 10. Without tracking specific customers and their organizations through time, further in-depth analysis is difficult. One important finding is that at least 1 of the 2 newest customers has already begun to develop negative feelings towards SPAWAR Charleston.

D. DISCUSSION OF FINDINGS

The employee data was collected and analyzed by a number of different division factors based on age, time with the company, location, organizational location and group size. The data was arranged in a number of charts for analysis purposes in order to locate patterns and trends in the data. These patterns were identified by grouping the responses into 3 areas based on small ranges of the potential number responses to each question on a scale of 1 to 10.

Using these three groupings, three distinct negative patterns stand out. These negative patterns provide a pointer to the overall trend of future responses to these questions if no changes to the current environment are made. These three trends are:

1. Employees appear to be generally frustrated or unable to readily identify the business capabilities, advantages and value for the businesses' customers.
2. A strong feeling of lack of open and honest communications up and down and across the organization exists for most employees.
3. A general feeling of mistrust of current supervisors and peers to do the right thing and to act with fairness and integrity also exists.

Overall there were positive numbers to show a high predicted retention rate for the next 2 years, but the general trend of building loyalty for the Command appears to indicate a continued move in the opposite direction if action is not taken to address all or parts of the smaller three trends listed above.

The responses to the open end question found the single most often noted comment was the desire of employees to have improved communications and information flow. Other responses included ideas related to removing the Navy Marine Corp Intranet from the Command to direct comments on the survey instrument itself. No other discernible pattern was noted or found in these comments.

The customer results are quite mixed. At first glance the responses appear to be good. Deeper analysis shows however that given opportunities, four and possibly as many as five of the ten respondents would leave to do business with someone else if that someone else has a better value proposition. This fact, coupled with the shortness of the rating scale, could possibly be hiding a significant area of concern for future retention. It also might imply that these customers feel trapped in a relationship they would like to not have, but now can not afford to easily change.

As mentioned previously, not discernible pattern was is found in the category area by relationship length. At least half of the respondents in almost every relationship length period had one or more negative things to say about their relationship with SPAWAR Charleston. It is particularly notable that in the first two time lengths that recently acquired customers already doubt the value of their relationship with SPAWAR Charleston. Possibly mistakes were made that soured the relationship or the dissenting customers were not originally good acquisitions for the group and indicate poor future possibilities with these customers.

This area requires further long term tracking and possibly the addition of tracking customer by organization to continue in provided better long term insight.

E. CHAPTER SUMMARY

This chapter provides a description and analysis of the data collected from the survey instrument described in the previous chapter. The survey instrument yielded a wealth of data that positively identified several trends in the employee and customer base of the Code 61 Division. The results generally show a positive trend for predicted retention, but several negative trends that should be further investigated for cause and possible action to correct. From this the Division now has a baseline to use in future reapplications of the instrument to track progress and continually refine its capabilities and goals to better serve its customers and employees.

V. CONCLUSIONS

A. SUMMARY

The purpose of this thesis is to provide an assessment and baseline of data for the Code 61 Division using a loyalty based survey instrument. These results are important because they give management insight into areas in which work and effort are needed to improve employee and customer retention and to continue to create an environment that promotes growth.

The results of this study provided valuable insight and data to address the research questions of this thesis.

1. How satisfied and loyal are the current customers of SPAWAR Charleston?

The answer to this question is mixed. SPAWAR Charleston Division 61 has a good predicted retention of existing customers and most claim that they are satisfied. The discussion in this thesis however noted that satisfaction alone doesn't accurately predict retention.

There are several large negatives that imply instability in many of these existing relationships, regardless of customer length of service. These customers may be ready to move on if opportunity arises or the barriers to exit change sharply.

2. How satisfied and loyal are the current employees of SPAWAR Charleston?

Current employees appear to have a mixed response on how satisfied and loyal they are to SPAWAR Charleston. The employee responses showed that in general the Division was split between 'satisfied' employees and the sum of the 'average' and 'below average' satisfied employees in most areas. The current employees showed a positive retention for the future, but negative trend results observed in current employee loyalty could begin to erode this position moving forward.

To reinforce the positive predicted retention, the survey results identified three areas that current management can focus on to improve and reserve this negative trend. These areas related to improved communications, improved business awareness and understanding and identification of operating norms and the building and reinforcement of a culture based on fairness, openness and integrity.

3. Does SPAWAR Charleston have more loyal customers and employees than disloyal or indifferent ones?

The basis for this question comes from the Harvard Business Review article by Mr. Fredrick Reichheld and his associates in which they assert that for a company to have continued growth and success, the business as a whole must have a positive net answer to the equation:

Loyal/promoters – disloyal/detractors

A positive answer means the company has more promoters than detractors and can therefore expect continued growth. A negative number means the business has more detractors than promoters and can therefore expect a business base contraction and loss of good employees and long term, repeat customers.

The customer numbers show overall that the answer to this question is probably close to 0. No clear pattern exists to give a more succinct answer at this time. It is possible that management could discuss with their customers the reasons for the poor performing answers and make corrections based on feedback. More in-depth analysis may be necessary to find the root cause of many of these issues however. Good starting questions would be ones such as:

1. Are we supporting you in the best way possible for your needs?
2. How can we improve the response and effectiveness of the work we are doing for you?
3. Why do you do business with us and how do we add to your business edge/capability?

4. What do you see as are top 2 or 3 capabilities that drew you to employ our organization in helping yours?

The employee results show the answer to the above equation to be close to 0. It would appear from the data the Division has reached a plateau based on past growth. Continued growth and forward movement to capture more customers and outstanding employees the areas identified in question number 2 above must be addressed. Those results were: improved communications, improved business awareness and understanding and identification of operating norms and the building and reinforcement of a culture based on fairness, openness and integrity.

4. What findings exist that may provide insight into future growth of loyal customers and retention of existing ones?

Overall, the predicted retention of the current customer base in good. There are several areas of concern that need to be addressed to improve this to excellent however. Management must continue to tighten and hone the message about the value proposition that SPAWAR Charleston brings and where it offers clear business capabilities for its customers. This in turn will lead to better customer acquisition. Current customers need to be canvassed to find where things have gone wrong to either improve those relationships immediately or fold the feedback provided into future customer interactions.

5. What findings exist that may provide insight into future acquisition of loyal employees and retention of existing ones?

Overall, the predicted retention of the current employee base is fairly high. However, based on the answer to question number 3 (Does SPAWAR Charleston have more loyal customers and employees than disloyal or indifferent ones?) and the generally negative trend discussed in question 2 (How satisfied and loyal are the current employees of SPAWAR Charleston?), it would appear that without management intervention and action the Division will not be successful in attracting bright new employees and may even begin to have

problems retaining existing ones. As this trend reverses so should the ability improve in substantially in this area.

B. LESSIONS LEARNED

Over the course of study opportunities occurred where ideas and items were noted that could have extended or provided more insight in specific areas. These items would have provided for a richer analysis.

Most importantly is the realization that making survey responses voluntary will most likely lead to a very poor response rate. Despite generally strong management support of the task, achieving even modest response numbers required a substantial effort of personal lobbying, prodding and individual discussion with many of the respondents. Making it worth the time of the respondents to actually respond required more active participation and goal setting on all parties' behalf.

When preparing an instrument such as the one in this thesis, substantial effort should be given and applied to the setting up of the questions used to categorize the data into different analysis views. Many respondents as well as others provided additional evaluation categories that may have been helpful in further narrowing the cause and area of some of the trends identified.

For instance, the division workforce is divided among engineers, technicians and administrative personnel. Analysis along these lines may provide additional data that could better indicate problem areas based on job type in addition to the other factors used.

Lastly, for this analysis to be truly effective long term a method should be devised to track specific employee relationships to specific customers or at least by customer type. The analysis performed in this thesis is sufficient for providing a high level business indicator, but in-depth data analysis and findings are not possible with the coarseness of the data currently collected.

C. CONLUSION

This thesis provided information and answers to questions that will help the Code 61 Division continue to improve and retain existing customers and employees. The data provides some strong patterns that management can now focus on to improve its capabilities and possibilities for capturing future work.

The successful implementation of the instrument in this thesis provides a basis and foundation for the future. The instrument can be re-utilized to continue to measure the effectiveness of any changes made by management and their impact. Overall, the Division team has been positive and accepting of the data and has already begun to analyze and discuss ways to improve in all of these areas. The team has set aside time to discuss the findings with their respective groups to better understand their answers and possible solutions.

D. SUGGESTED TOPICS FOR FUTURE RESEARCH

This research provided an application of a commercial best practice of measuring customer and employee loyalty to predict retention and future growth. The following topics are areas that should be considered for future research.

- **Continue to evaluate Division 61 in the future using the methods shown in this thesis.** Only long term data collection can truly establish a baseline of data to work from. The data collected and analyzed here is only reflective of a moment in time.
- **Expand evaluation to all of Department 61 and/or all of SPAWAR Charleston.** Doing a similar analysis across a wider data set would lead to better analysis and establishment of baselines for the entire business organization. Topics and areas identified for improvement could then be the subject of process improvement, training or any other number of larger scale retention and improvement activities.
- **Perform evaluation on other WCF activities.** It is quite possible that all WCF activities may share areas of similarity in business

improvement, etc. Analysis by the methods presented in this thesis could assist other organizations who are looking for good or better feedback mechanisms applicable to the government marketplace.

APPENDIX A: TITLE 10, SUBTITLE A, PART IV, CHAPTER 131, SECTION 2208 – WORKING CAPITAL ACTIVITIES

The formatting in this Appendix is different than throughout the rest of this document due to the formatting requirements of the US Code.

Sec. 2208. - Working-capital funds:

(a) To control and account more effectively for the cost of programs and work performed in the Department of Defense, the Secretary of Defense may require the establishment of working-capital funds in the Department of Defense to –

(1) finance inventories of such supplies as he may designate; and

(2) provide working capital for such industrial-type activities, and such commercial-type activities that provide common services within or among departments and agencies of the Department of Defense, as he may designate.

(b) Upon the request of the Secretary of Defense, the Secretary of the Treasury shall establish working-capital funds established under this section on the books of the Department of the Treasury.

(c) Working-capital funds shall be charged, when appropriate, with the cost of -

(1) supplies that are procured or otherwise acquired, manufactured, repaired, issued, or used; and

(2) services or work performed; including applicable administrative expenses, and be reimbursed from available appropriations or otherwise credited for those costs, including applicable administrative expenses and costs of using equipment.

(d) The Secretary of Defense may provide capital for working-capital funds by capitalizing inventories. In addition, such amounts may be appropriated for the purpose of providing capital for working-capital funds as have been specifically authorized by law.

(e) Subject to the authority and direction of the Secretary of Defense, the Secretary of each military department shall allocate responsibility for its functions, powers, and duties to accomplish the most economical and efficient organization and operation of the activities, and the most economical and efficient use of the inventories, for which working-capital funds are authorized by this section.

(f) The requisitioning agency may not incur a cost for supplies drawn from inventories, or services or work performed by industrial-type or commercial-type activities for which working-capital funds may be established under this section, that is more than the amount of appropriations or other funds available for those purposes.

(g) The appraised value of supplies returned to working-capital funds by a department, activity, or agency may be charged to that fund. The proceeds thereof shall be credited to current applicable appropriations and are available for expenditure for the same purposes that those appropriations are so available. Credits may not be made to appropriations under this subsection as the result of capitalization of inventories under subsection (d).

(h) The Secretary of Defense shall prescribe regulations governing the operation of activities and use of inventories authorized by this section. The regulations may, if the needs of the Department of Defense require it and it is otherwise authorized by law, authorize supplies to be sold to, or services to be rendered or work performed for, persons outside the Department of Defense. However, supplies available in inventories financed by working capital funds established under this section may be sold to contractors for use in performing contracts with the Department of Defense. Working-capital funds shall be reimbursed for supplies so sold, services so rendered, or work so performed by charges to applicable appropriations or payments received in cash.

(i) For provisions relating to sales outside the Department of Defense of manufactured articles and services by a working-capital funded Army industrial facility (including a Department of the Army arsenal) that manufactures large

caliber cannons, gun mounts, recoil mechanisms, ammunition, munitions, or components thereof, see section 4543 of this title.

(j)

(1) The Secretary of a military department may authorize a working capital funded industrial facility of that department to manufacture or remanufacture articles and sell these articles, as well as manufacturing, remanufacturing, and engineering services provided by such facilities, to persons outside the Department of Defense if -

(A) the person purchasing the article or service is fulfilling a Department of Defense contract or a subcontract under a Department of Defense contract, and the solicitation for the contract or subcontract is open to competition between Department of Defense activities and private firms; or

(B) the Secretary would advance the objectives set forth in section 2474(b)(2) of this title by authorizing the facility to do so.

(2) The Secretary of Defense may waive the conditions in paragraph (1) in the case of a particular sale if the Secretary determines that the waiver is necessary for reasons of national security and notifies Congress regarding the reasons for the waiver.

(k)

(1) Subject to paragraph (2), a contract for the procurement of a capital asset financed by a working-capital fund may be awarded in advance of the availability of funds in the working-capital fund for the procurement.

(2) Paragraph (1) applies to any of the following capital assets that have a development or acquisition cost of not less than $100,000:

(A) An unspecified minor military construction project under section 2805(c)(1) of this title.

(B) Automatic data processing equipment or software.

(C) Any other equipment.

(D) Any other capital improvement.

(l)

(1) An advance billing of a customer of a working-capital fund may be made if the Secretary of the military department concerned submits to Congress written notification of the advance billing within 30 days after the end of the month in which the advanced billing was made. The notification shall include the following:

(A) The reasons for the advance billing.

(B) An analysis of the effects of the advance billing on military readiness.

(C) An analysis of the effects of the advance billing on the customer.

(2) The Secretary of Defense may waive the notification requirements of paragraph (1) -

(A) during a period of war or national emergency; or

(B) to the extent that the Secretary determines necessary to support a contingency operation.

(3) The total amount of the advance billings rendered or imposed for all working-capital funds of the Department of Defense in a fiscal year may not exceed $1,000,000,000.

(4) In this subsection:

(A) The term ''advance billing'', with respect to a working-capital fund, means a billing of a customer by the fund, or a requirement for a customer to reimburse or otherwise credit the fund, for the cost of goods or services provided (or for other expenses incurred) on behalf of the customer that is rendered or imposed before the customer receives the goods or before the services have been performed.

(B) The term ''customer'' means a requisitioning component or agency.

(m) Capital Asset Subaccounts. - Amounts charged for depreciation of capital assets shall be credited to a separate capital asset subaccount established within a working-capital fund.

(n) Separate Accounting, Reporting, and Auditing of Funds and Activities. - The Secretary of Defense, with respect to the working-capital funds of each Defense Agency, and the Secretary of each military department, with respect to the working-capital funds of the military department, shall provide for separate accounting, reporting, and auditing of funds and activities managed through the working-capital funds.

(o) Charges for Goods and Services Provided Through the Fund. -

(1) Charges for goods and services provided for an activity through a working-capital fund shall include the following:

(A) Amounts necessary to recover the full costs of the goods and services provided for that activity.

(B) Amounts for depreciation of capital assets, set in accordance with generally accepted accounting principles.

(2) Charges for goods and services provided through a working-capital fund may not include the following:

(A) Amounts necessary to recover the costs of a military construction project (as defined in section 2801(b) of this title), other than a minor construction project financed by the fund pursuant to section 2805(c)(1) of this title.

(B) Amounts necessary to cover costs incurred in connection with the closure or realignment of a military installation.

(C) Amounts necessary to recover the costs of functions designated by the Secretary of Defense as mission critical, such as ammunition handling safety, and amounts for ancillary tasks not directly related to the mission of the function or activity managed through the fund.

(p) Procedures For Accumulation of Funds. - The Secretary of Defense, with respect to each working-capital fund of a Defense Agency, and the Secretary of a military department, with respect to each working-capital fund of the military department, shall establish billing procedures to ensure that the balance in that working-capital fund does not exceed the amount necessary to provide for the working-capital requirements of that fund, as determined by the Secretary.

(q) Annual Reports and Budget. - The Secretary of Defense, with respect to each working-capital fund of a Defense Agency, and the Secretary of each military department, with respect to each working-capital fund of the military department, shall annually submit to Congress, at the same time that the President submits the budget under section 1105 of title 31, the following:

(1) A detailed report that contains a statement of all receipts and disbursements of the fund (including such a statement for each subaccount of the fund) for the fiscal year ending in the year preceding the year in which the budget is submitted.

(2) A detailed proposed budget for the operation of the fund for the fiscal year for which the budget is submitted.

(3) A comparison of the amounts actually expended for the operation of the fund for the fiscal year referred to in paragraph (1) with the amount proposed for the operation of the fund for that fiscal year in the President's budget.

(4) A report on the capital asset subaccount of the fund that contains the following information:

(A) The opening balance of the subaccount as of the beginning of the fiscal year in which the report is submitted.

(B) The estimated amounts to be credited to the subaccount in the fiscal year in which the report is submitted.

(C) The estimated amounts of outlays to be paid out of the subaccount in the fiscal year in which the report is submitted.

(D) The estimated balance of the subaccount at the end of the fiscal year in which the report is submitted.

(E) A statement of how much of the estimated balance at the end of the fiscal year in which the report is submitted will be needed to pay outlays in the immediately following fiscal year that are in excess of the amount to be credited to the subaccount in the immediately following fiscal year

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APPENDIX B: SAMPLE OF EMPLOYEE SURVEY

EMPLOYEE SURVEY

Please answer each question by checking or filling in the circle that best describes how you feel. If you change your mind, cross out or erase your answer. This survey should take about 20 minutes to complete.

Section 1

Your relationship with SPAWAR Charleston

On a scale of 1 to 10, with 0 being 'Completely Disagree' and 10 being 'Completely Agree', please rate the following statements:

1. How likely are you to be working for SPAWAR Charleston two years from now? ____

2. Overall, how satisfied are you with your relationship with your immediate manager? ____

3. Overall, how likely are you to provide enthusiastic referrals for SPAWAR Charleston? ____

4. The company communicates openly and honestly ____

5. The company is committed to win/win solutions (does not take advantage of its partners/customers) ____

6. I trust SPAWAR Charleston's leaders and employees to behave with fairness and integrity ____

7. Customer loyalty is appropriately rewarded and valued at SPAWAR Charleston ____

8. I believe that SPAWAR Charleston has earned my loyalty ____

9. Over the past year, my loyalty to SPAWAR Charleston has grown stronger ____

10. SPAWAR Charleston values people and relationships ahead of short term profits or gains ____

11. We make is easy for our customers to do business with us ____

12. This company sets the standards for excellence in our industry ____

13. The company has a winning strategy (superior economics in servings its customers) ____

14. The company attracts and retains outstanding people (employees, partners, etc.) ____

15. Company creates innovative solutions that makes our customers lives easier ____

16. I feel like I am an active and respected part of a team at SPAWAR Charleston ____

What is the single improvement that SPAWAR Charleston could make to increase your loyalty to it?

_____

_____

_____

_____

Section 2

Descriptive Information

These last questions will help up divide the interviews into groups.

How long have you been an employee of SPAWAR Charleston?

- o Less than one year
- o One to less than three years
- o Three to less than five years
- o Five to less than ten years
- o Ten years or more

What is your position? (check one)

- o Executive/Upper management
- o Middle Management
- o Supervisor
- o Individual contributor - salaried

How many other individuals report to the same person you do?

- o Less than five
- o Five to ten
- o Ten to fifteen
- o Fifteen to twenty
- o Twenty or more

What location do you work at?

- o Main Corporate office (Bldg 3147)
- o Main Corporate location (not Bldg 3147)
- o Field office

What is your age range?

- o 19-24
- o 25-29
- o 30-34
- o 35-39
- o 40-44
- o 45-49
- o 50-54
- o Over 55

In what functional area to you work?

- o Operations
- o Contracts
- o Finance
- o Management

Thank you for your time and valuable feedback.

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APPENDIX C: SAMPLE OF CUSTOMER SURVEY

CUSTOMER SURVEY

Please answer each question by checking or filling in the circle that best describes how you feel. If you change your mind, cross out or erase your answer. This survey should take about 20 minutes to complete.

Section 1

Your feelings about SPAWAR Charleston

1. How likely are you to …

Continue buying SPAWAR Charleston's products or services?

○ Extremely Likely ○ Very Likely ○ Somewhat Likely ○ Not Very Likely ○ Not at All Likely

2. How likely are you to …

Provide enthusiastic referrals for SPAWAR Charleston?

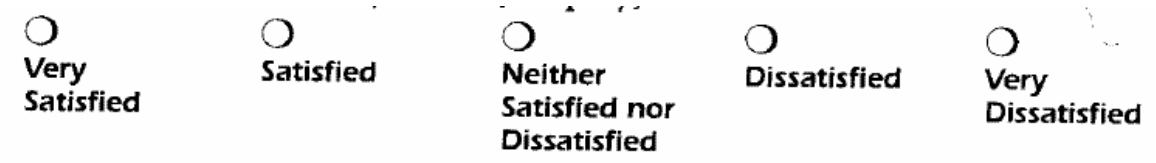
○ Extremely Likely ○ Very Likely ○ Somewhat Likely ○ Not Very Likely ○ Not at All Likely

3. How much do you agree or disagree…

It would matter a lot if I could not continue buying from SPAWAR Charleston?

○ Strongly Agree ○ Agree ○ Neither Agree nor Disagree ○ Disagree ○ Strongly Disagree

4. Overall, how satisfied are you with SPAWAR Charleston?



Section 2

Your relationship with SPAWAR Charleston

On a scale of 1 to 10, with 0 being 'Completely Disagree' and 10 being 'Completely Agree', please rate the following statements:

1. SPAWAR Charleston really cares about building a relationship with me ____
2. SPAWAR Charleston communicates openly and honestly ____
3. SPAWAR Charleston is committed to win/win solutions (does not take advantage of its partners or customers) ____
4. I trust SPAWAR Charleston's leaders and employees to behave with fairness and integrity ____
5. Customer loyalty is appropriately rewarded and valued at SPAWAR Charleston ____
6. I believe that SPAWAR Charleston deserves my loyalty ____
7. Over the past year, my loyalty to SPAWAR Charleston has grown stronger ____
8. SPAWAR Charleston values people and relationships ahead of short term profits or gains ____
9. SPAWAR Charleston makes it easy for me to do business with them ____
10. SPAWAR Charleston sets the standard for excellence in its industry ____
11. SPAWAR Charleston has a winning strategy (superior economics in servings its customers) ____
12. SPAWAR Charleston attracts and retains outstanding people (employees, partners, etc.) ____

13. SPAWAR Charleston creates innovative solutions that make my life easier ____

What is the single improvement that SPAWAR Charleston could make to increase your loyalty to it?

_____

_____

_____

_____

Section 3

Descriptive Information

The last question will help up divide the interviews into groups.

How long have you been a customer of SPAWAR Charleston?

- o Less than one year
- o One to less than three years
- o Three to less than five years
- o Five to less than ten years
- o Ten years or more

Thank you for your time and valuable feedback.

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APPENDIX D: EMPLOYEE RESPONSE GRAPHS BY EMPLOYEMENT LENGTH

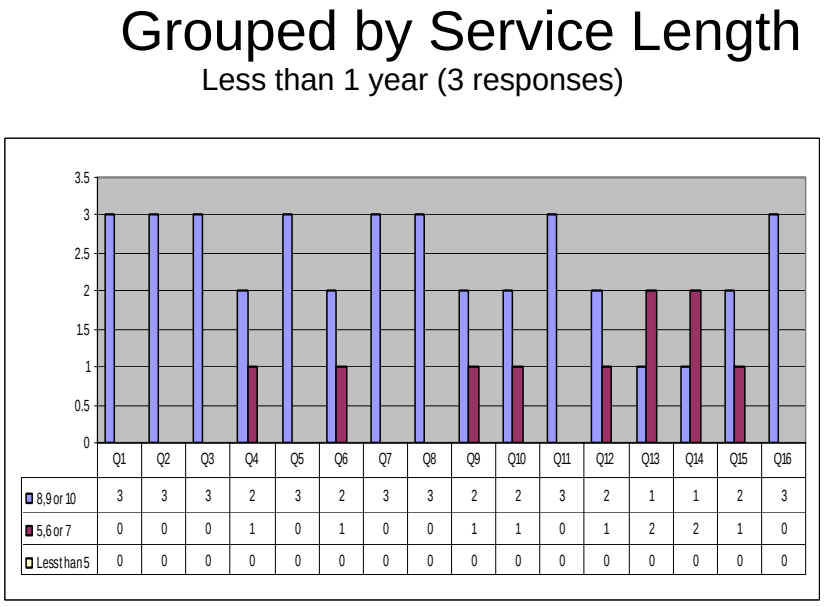


Figure 15. Employee Response by Service Length Less Than 1 Year

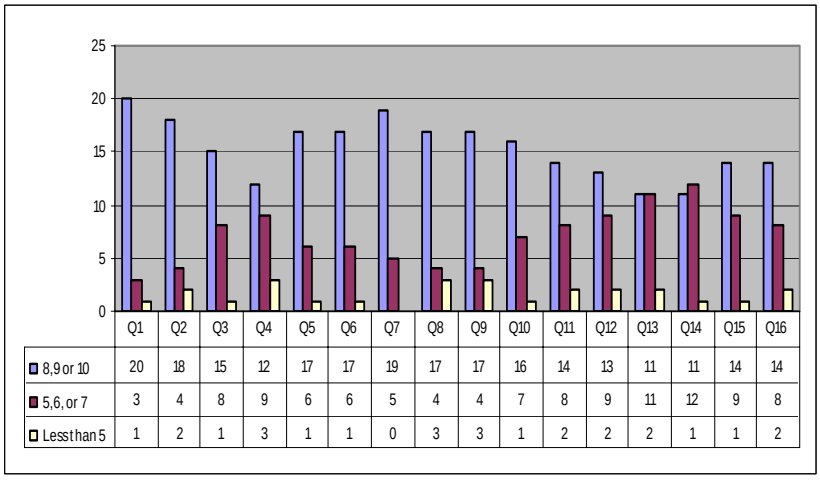


Figure 16. Employee Response by Service Length 1-3 Years

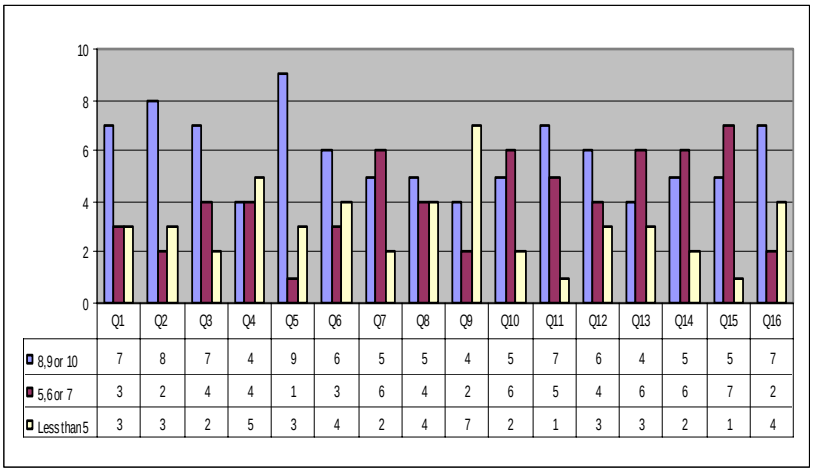


Figure 17. Employee Response by Service Length 3 to Less Than 5

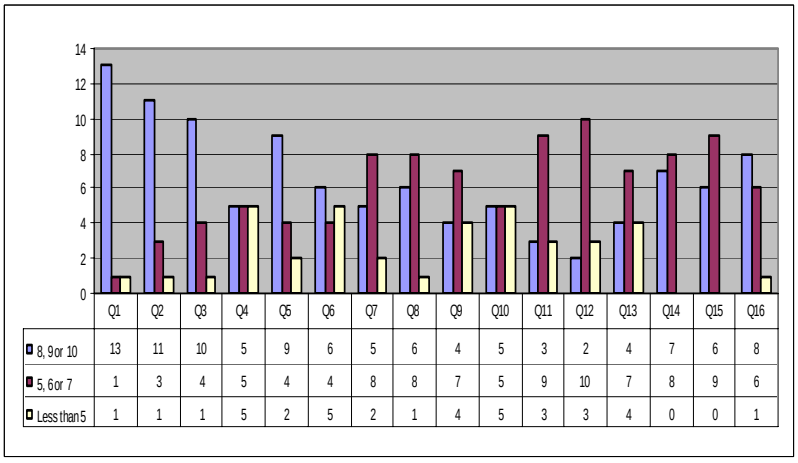


Figure 18. Employee Response by Service Length 3 to Less Than 5

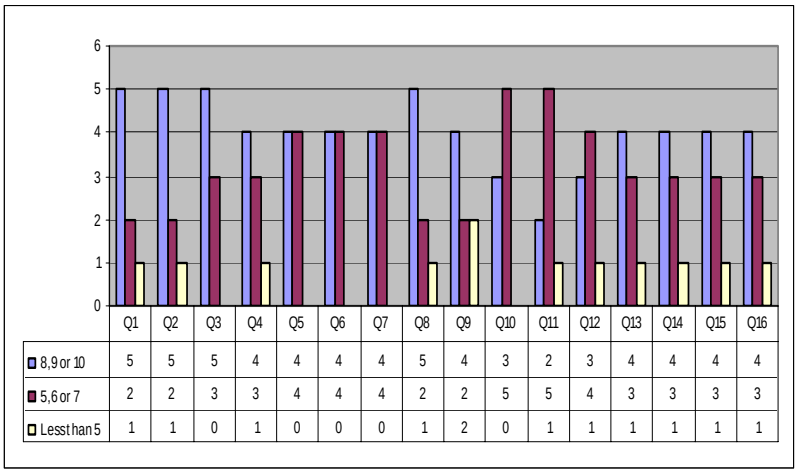


Figure 19. Employee Response by Service Length 10 or More

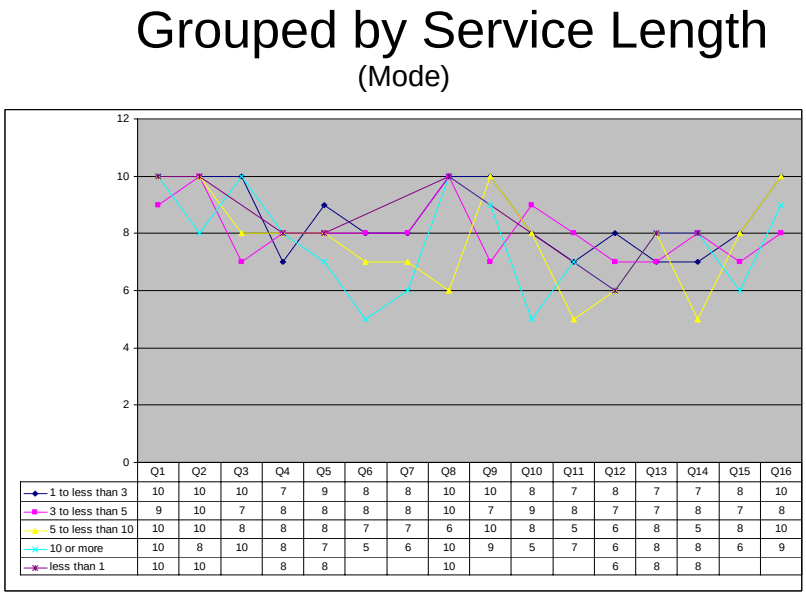
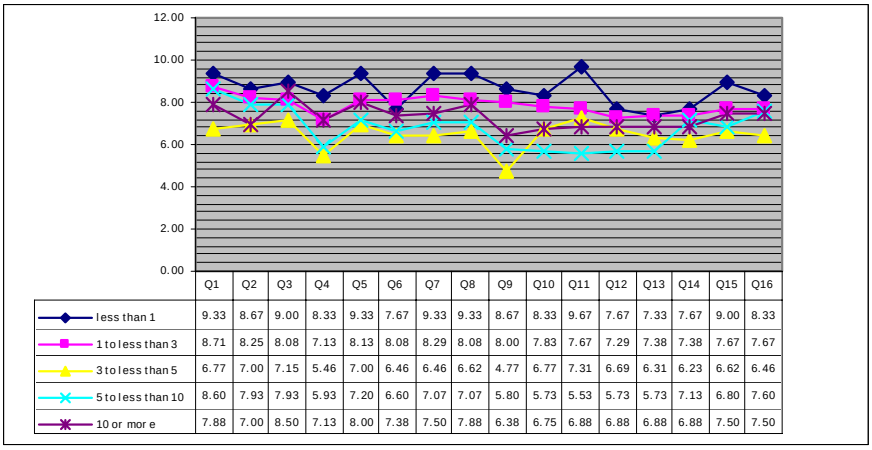


Figure 20. Employee Response by Service Length Mode

Grouped by Service Length

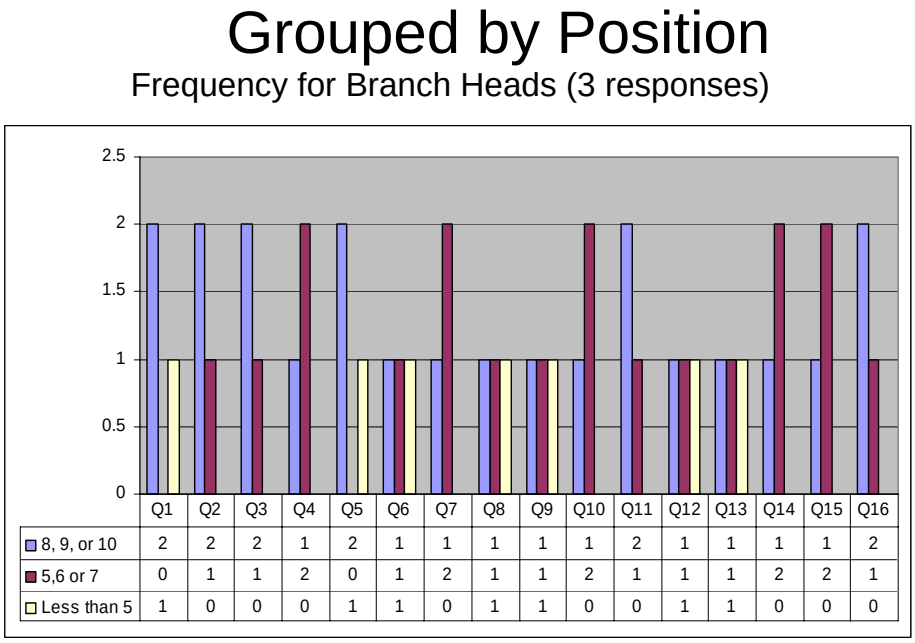
(Averages – St. dev. of approx. 2)



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
less than 1	9.33	8.67	9.00	8.33	9.33	7.67	9.33	9.33	8.67	8.33	9.67	7.67	7.33	7.67	9.00	8.33
1 to less than 3	8.71	8.25	8.08	7.13	8.13	8.08	8.29	8.08	8.00	7.83	7.67	7.29	7.38	7.38	7.67	7.67
3 to less than 5	6.77	7.00	7.15	5.46	7.00	6.46	6.46	6.62	4.77	6.77	7.31	6.69	6.31	6.23	6.62	6.46
5 to less than 10	8.60	7.93	7.93	5.93	7.20	6.60	7.07	7.07	5.80	5.73	5.53	5.73	5.73	7.13	6.80	7.60
10 or more	7.88	7.00	8.50	7.13	8.00	7.38	7.50	7.88	6.38	6.75	6.88	6.88	6.88	6.88	7.50	7.50

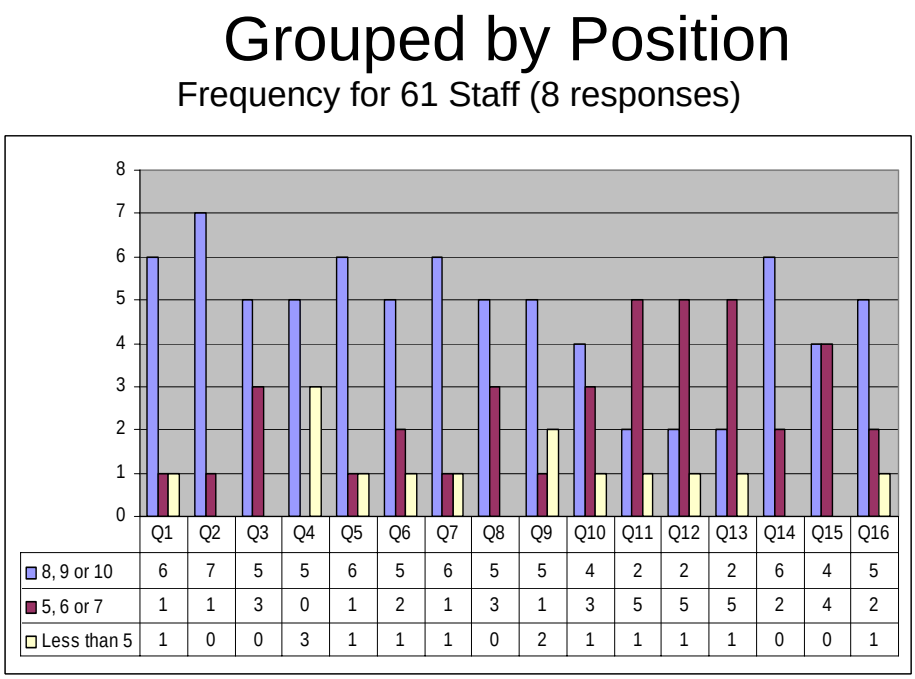
Figure 21. Employee Response by Service Length Mean

APPENDIX E: EMPLOYEE RESPONSE GRAPHS BY POSITION



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8, 9, or 10	2	2	2	1	2	1	1	1	1	1	2	1	1	1	1	2
5,6 or 7	0	1	1	2	0	1	2	1	1	2	1	1	1	2	2	1
Less than 5	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0

Figure 22. Employee Response by Position – Branch Head

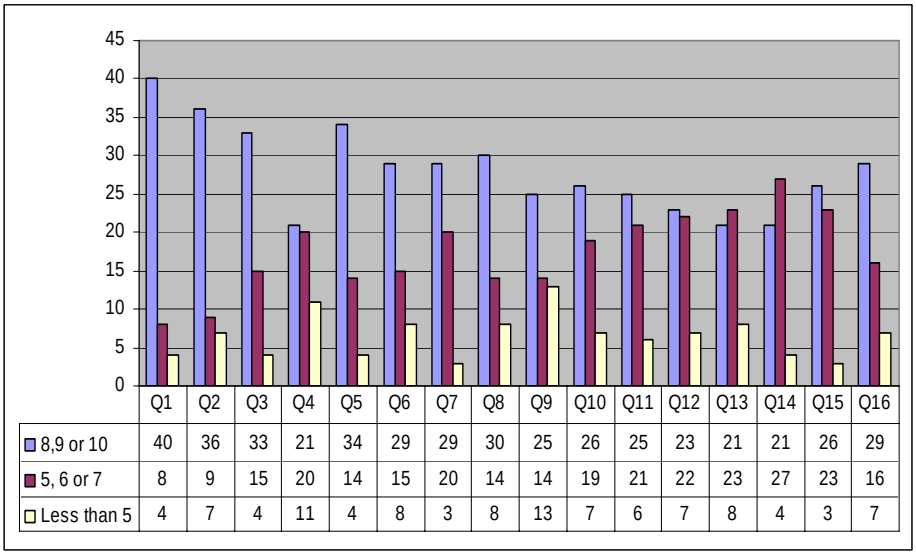


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8, 9 or 10	6	7	5	5	6	5	6	5	5	4	2	2	2	6	4	5
5, 6 or 7	1	1	3	0	1	2	1	3	1	3	5	5	5	2	4	2
Less than 5	1	0	0	3	1	1	1	0	2	1	1	1	1	0	0	1

Figure 23. Employee Response by Position – 61 Staff

Grouped by Position

Frequency for Salaried Positions (52 responses)

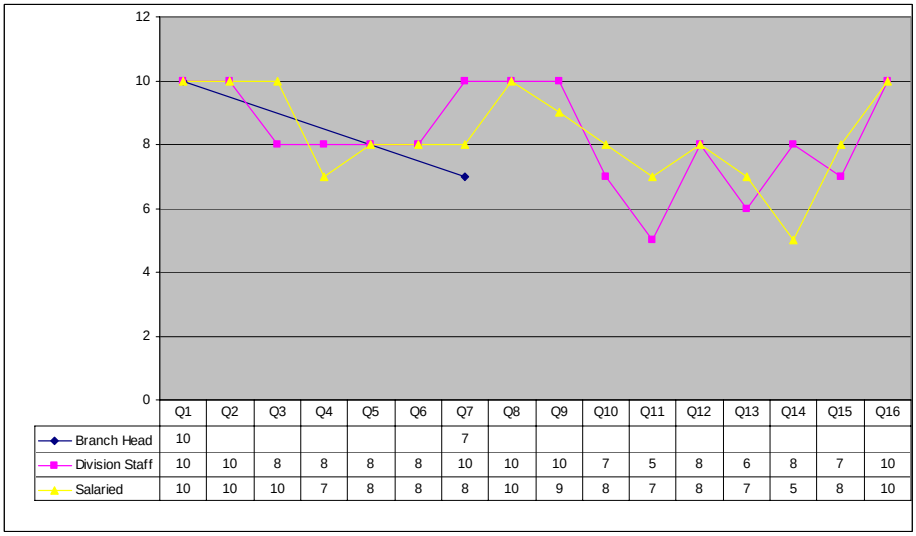


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	40	36	33	21	34	29	29	30	25	26	25	23	21	21	26	29
5, 6 or 7	8	9	15	20	14	15	20	14	14	19	21	22	23	27	23	16
Less than 5	4	7	4	11	4	8	3	8	13	7	6	7	8	4	3	7

Figure 24. Employee Response by Position – Salaried Positions

Grouped by Positions

(Mode)

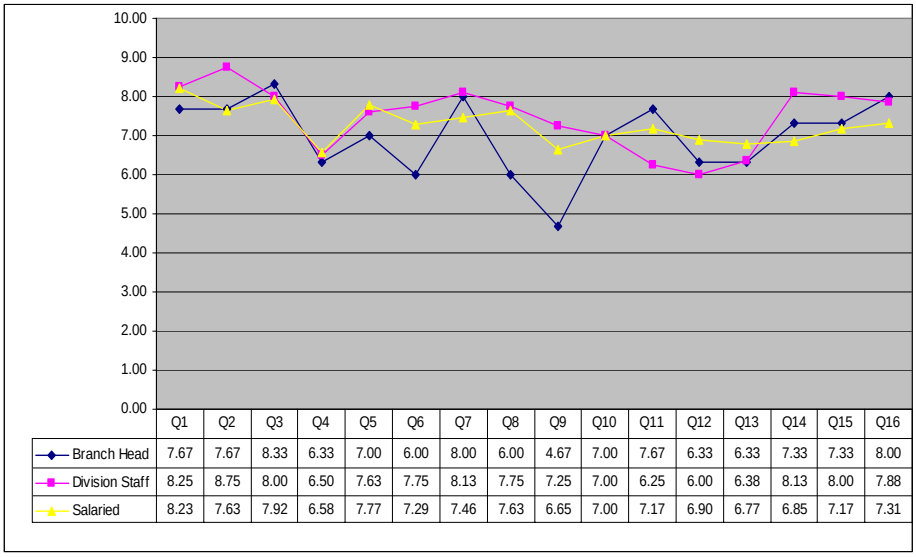


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Branch Head	10						7									
Division Staff	10	10	8	8	8	8	10	10	10	7	5	8	6	8	7	10
Salaried	10	10	10	7	8	8	8	10	9	8	7	8	7	5	8	10

Figure 25. Employee Response by Position – Mode

Grouped by Positions

(Averages – St. dev. of approx. 2)



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Branch Head	7.67	7.67	8.33	6.33	7.00	6.00	8.00	6.00	4.67	7.00	7.67	6.33	6.33	7.33	7.33	8.00
Division Staff	8.25	8.75	8.00	6.50	7.63	7.75	8.13	7.75	7.25	7.00	6.25	6.00	6.38	8.13	8.00	7.88
Salaried	8.23	7.63	7.92	6.58	7.77	7.29	7.46	7.63	6.65	7.00	7.17	6.90	6.77	6.85	7.17	7.31

Figure 26. Employee Response by Position – Averages

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APPENDIX F: EMPLOYEE RESPONSE GRAPHS BY GROUP SIZE

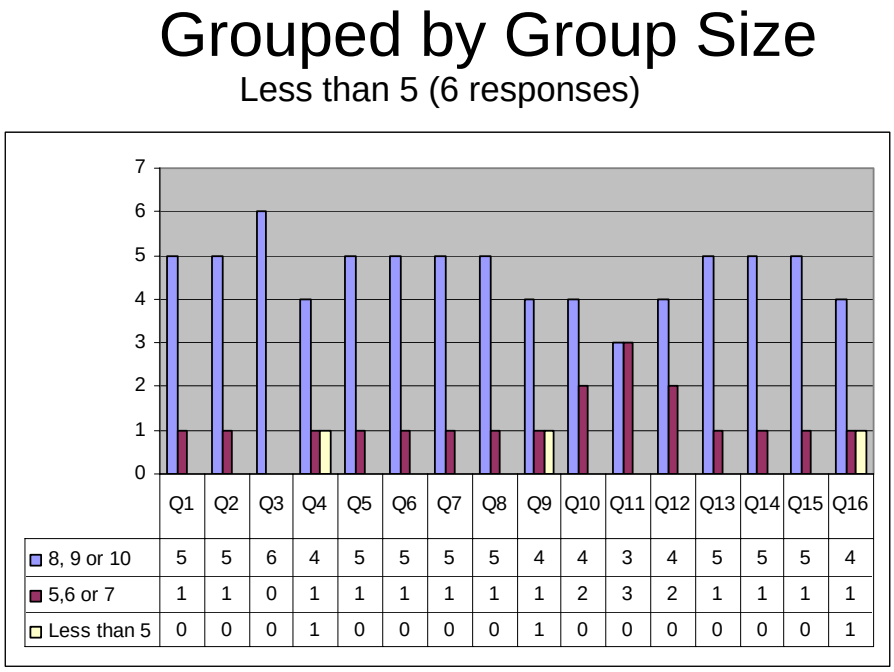


Figure 27. Employee Response by Group Size – Less than 5

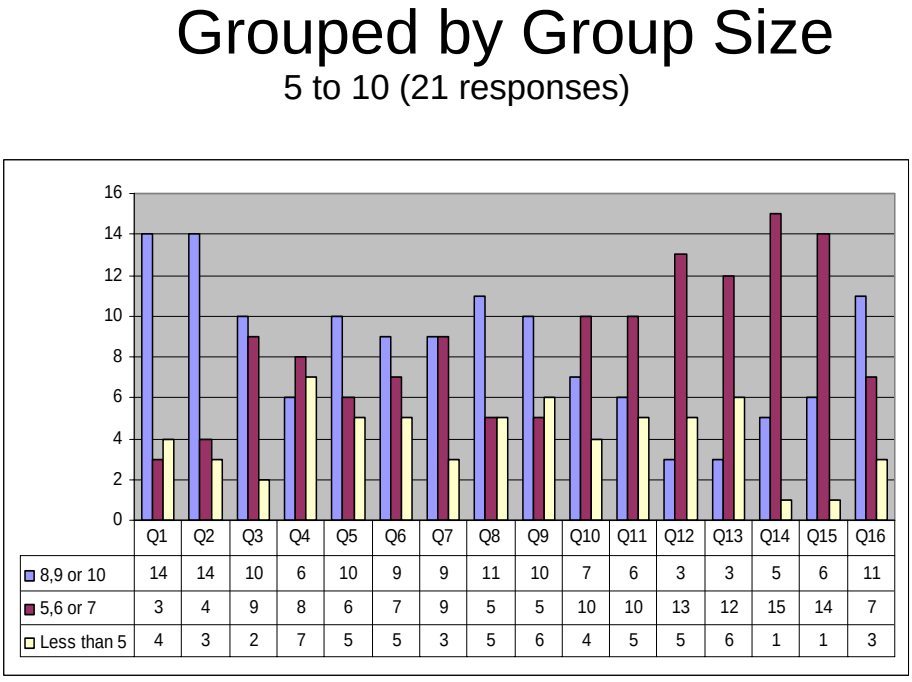
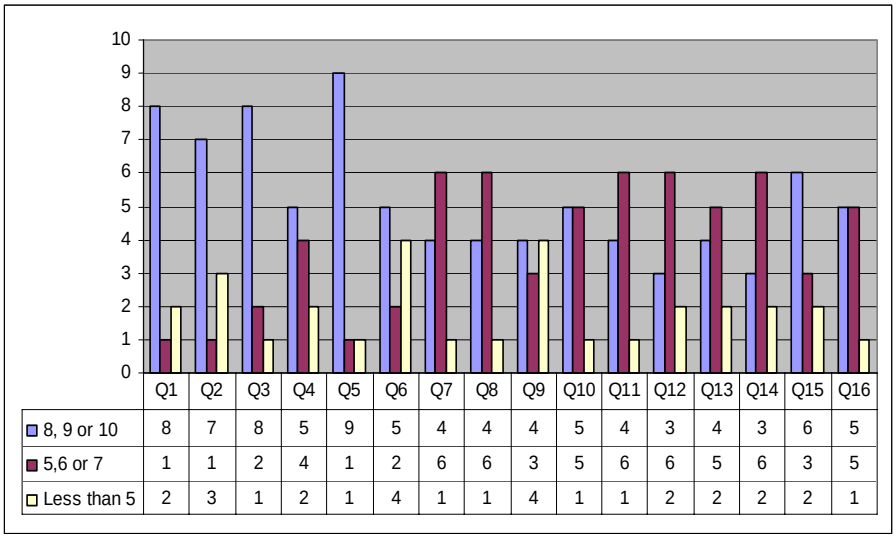


Figure 28. Employee Response by Group Size – 5 to 10

Grouped by Group Size

10 to 15 (11 responses)

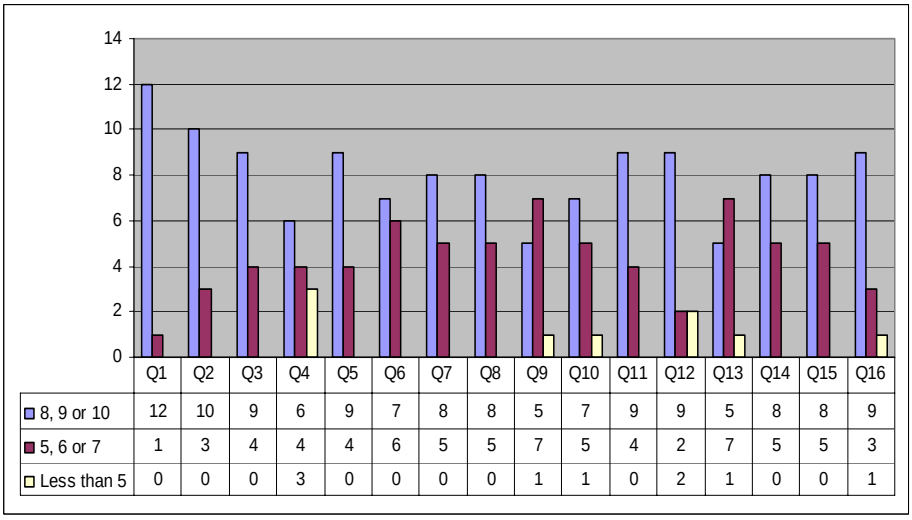


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8, 9 or 10	8	7	8	5	9	5	4	4	4	5	4	3	4	3	6	5
5,6 or 7	1	1	2	4	1	2	6	6	3	5	6	6	5	6	3	5
Less than 5	2	3	1	2	1	4	1	1	4	1	1	2	2	2	2	1

Figure 29. Employee Response by Group Size – 10 to 15

Grouped by Group Size

15 to 20 (13 responses)



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8, 9 or 10	12	10	9	6	9	7	8	8	5	7	9	9	5	8	8	9
5, 6 or 7	1	3	4	4	4	6	5	5	7	5	4	2	7	5	5	3
Less than 5	0	0	0	3	0	0	0	0	1	1	0	2	1	0	0	1

Figure 30. Employee Response by Group Size – 15 to 20

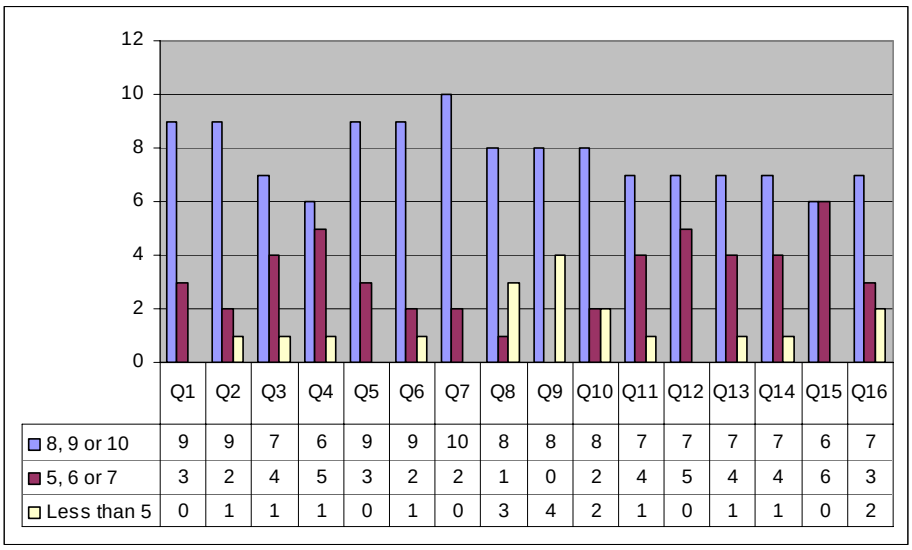


Figure 31. Employee Response by Group Size – 20 or more

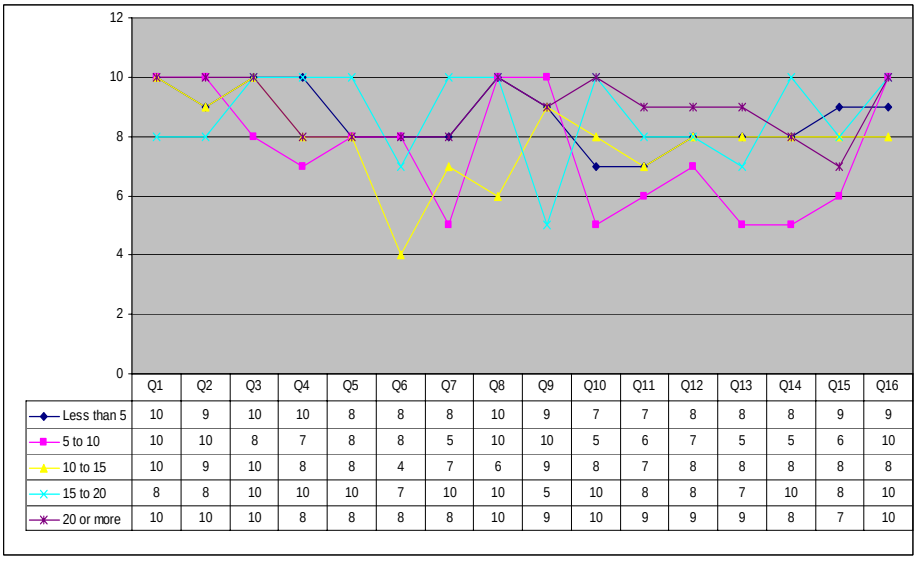
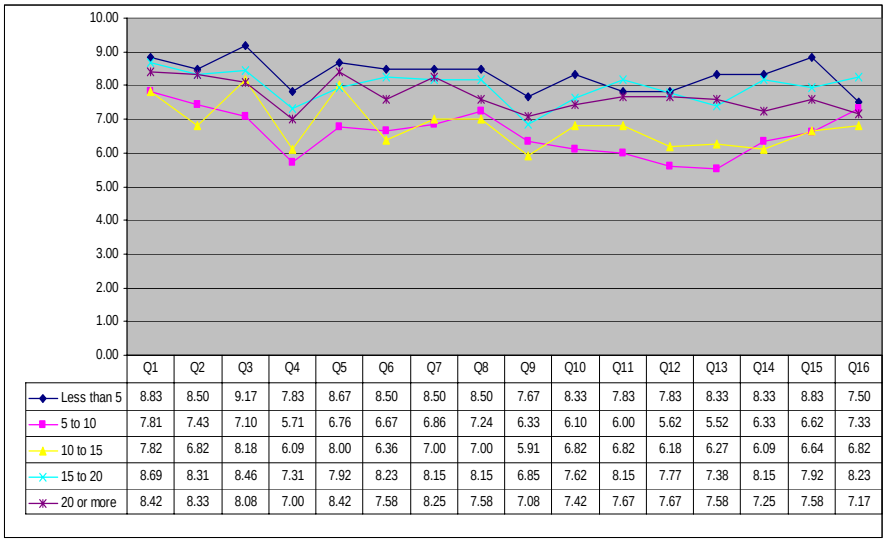


Figure 32. Employee Response by Group Size – Mode

Grouped by Group Size

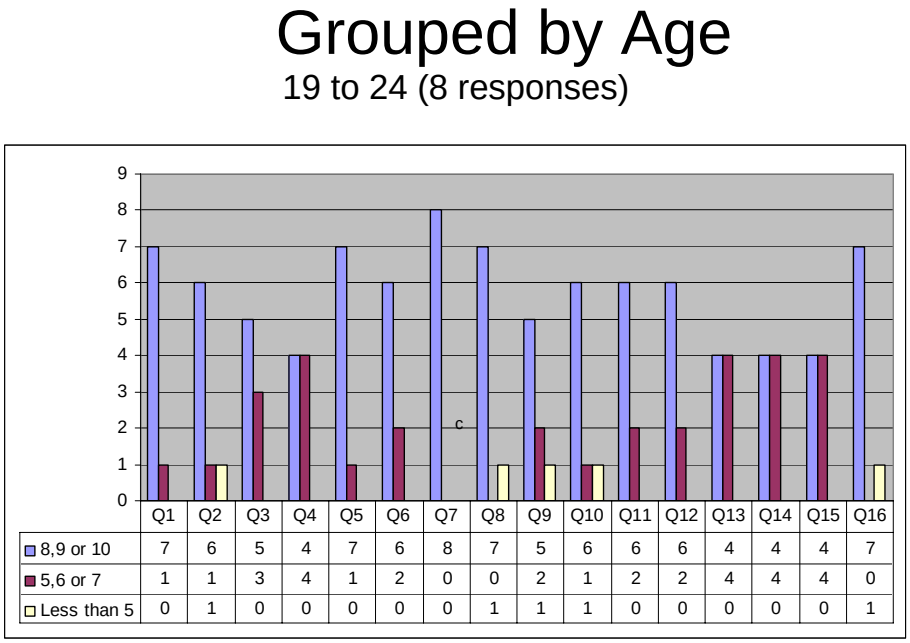
(Averages – St. dev. of approx. 2)



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Less than 5	8.83	8.50	9.17	7.83	8.67	8.50	8.50	8.50	7.67	8.33	7.83	7.83	8.33	8.33	8.83	7.50
5 to 10	7.81	7.43	7.10	5.71	6.76	6.67	6.86	7.24	6.33	6.10	6.00	5.62	5.52	6.33	6.62	7.33
10 to 15	7.82	6.82	8.18	6.09	8.00	6.36	7.00	7.00	5.91	6.82	6.82	6.18	6.27	6.09	6.64	6.82
15 to 20	8.69	8.31	8.46	7.31	7.92	8.23	8.15	8.15	6.85	7.62	8.15	7.77	7.38	8.15	7.92	8.23
20 or more	8.42	8.33	8.08	7.00	8.42	7.58	8.25	7.58	7.08	7.42	7.67	7.67	7.58	7.25	7.58	7.17

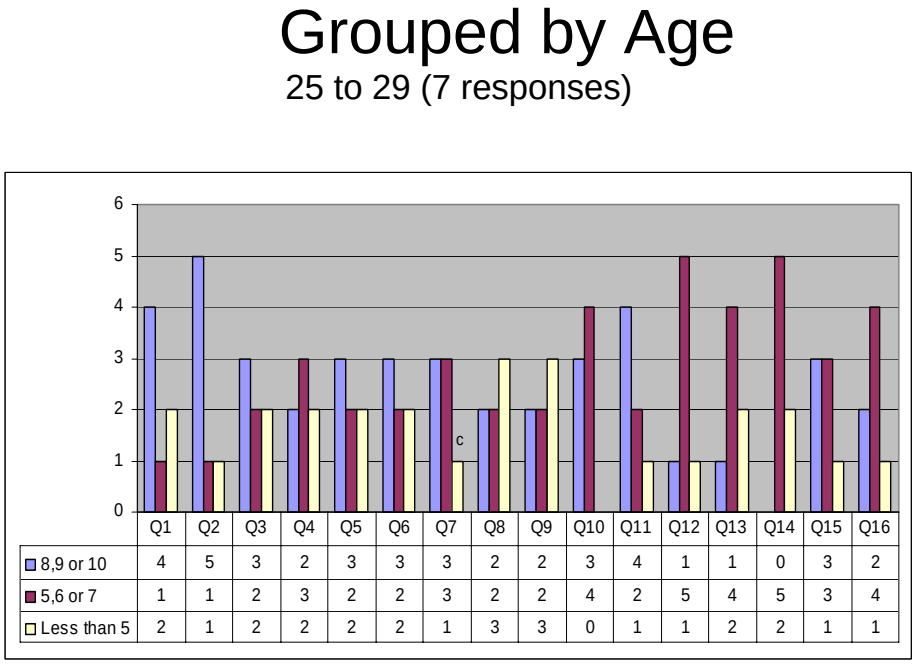
Figure 33. Employee Response by Group Size – Mean

APPENDIX G: EMPLOYEE RESPONSE GRAPHS BY AGE RANGE



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	7	6	5	4	7	6	8	7	5	6	6	6	4	4	4	7
5,6 or 7	1	1	3	4	1	2	0	0	2	1	2	2	4	4	4	0
Less than 5	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	1

Figure 34. Employee Response by Age Range – 19 to 24

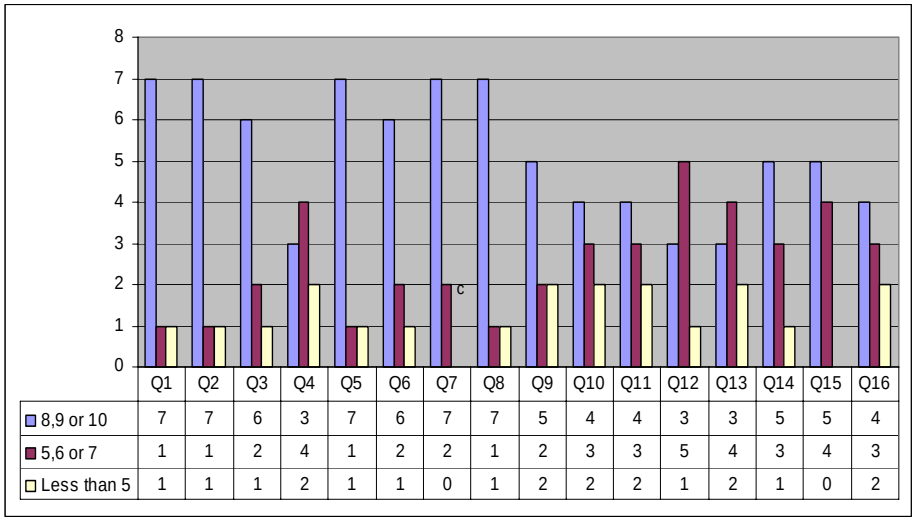


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	4	5	3	2	3	3	3	2	2	3	4	1	1	0	3	2
5,6 or 7	1	1	2	3	2	2	3	2	2	4	2	5	4	5	3	4
Less than 5	2	1	2	2	2	2	1	3	3	0	1	1	2	2	1	1

Figure 35. Employee Response by Age Range – 25 to 29

Grouped by Age

30 to 34 (9 responses)

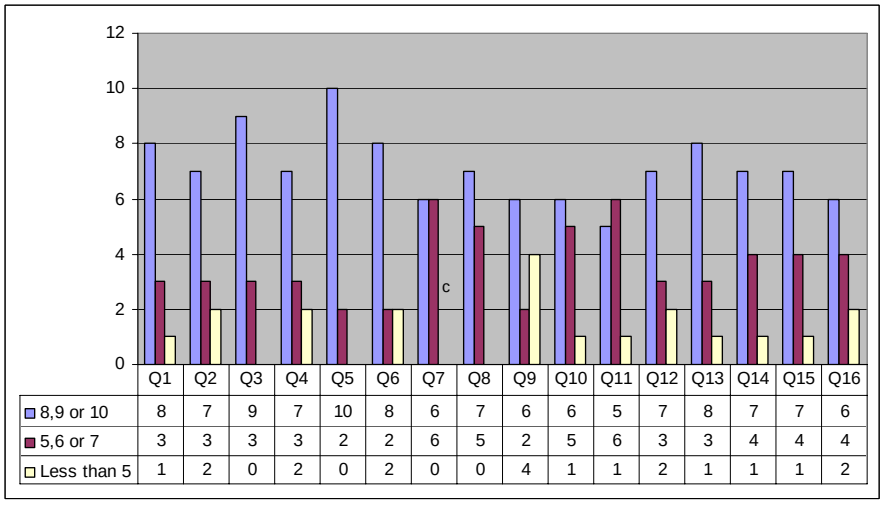


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	7	7	6	3	7	6	7	7	5	4	4	3	3	5	5	4
5,6 or 7	1	1	2	4	1	2	2	1	2	3	3	5	4	3	4	3
Less than 5	1	1	1	2	1	1	0	1	2	2	2	1	2	1	0	2

Figure 36. Employee Response by Age Range – 30 to 34

Grouped by Age

35 to 39 (12 responses)

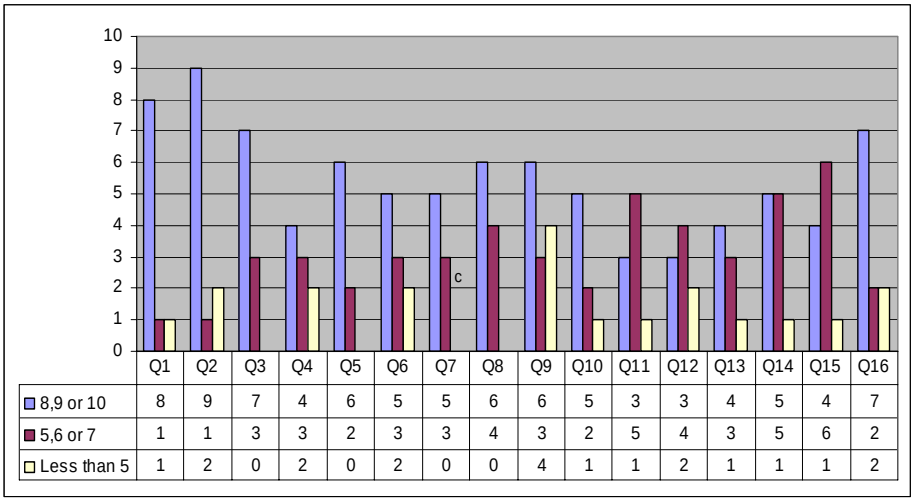


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	8	7	9	7	10	8	6	7	6	6	5	7	8	7	7	6
5,6 or 7	3	3	3	3	2	2	6	5	2	5	6	3	3	4	4	4
Less than 5	1	2	0	2	0	2	0	0	4	1	1	2	1	1	1	2

Figure 37. Employee Response by Age Range – 35 to 39

Grouped by Age

40 to 44 (10 responses)

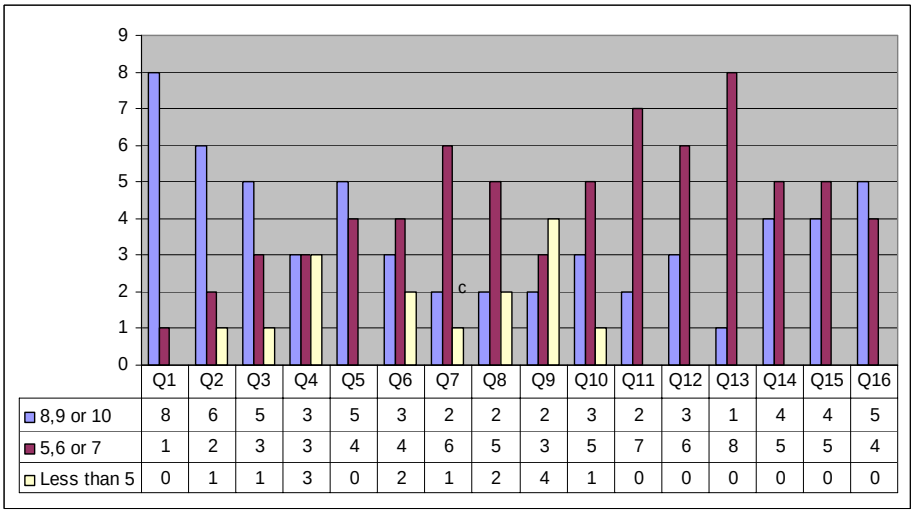


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	8	9	7	4	6	5	5	6	6	5	3	3	4	5	4	7
5,6 or 7	1	1	3	3	2	3	3	4	3	2	5	4	3	5	6	2
Less than 5	1	2	0	2	0	2	0	0	4	1	1	2	1	1	1	2

Figure 38. Employee Response by Age Range – 40 to 44

Grouped by Age

45 to 49 (9 responses)

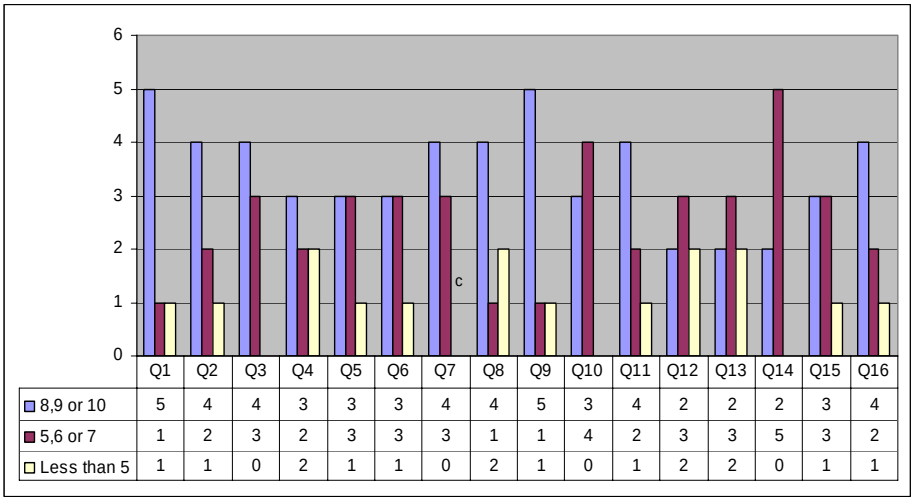


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	8	6	5	3	5	3	2	2	2	3	2	3	1	4	4	5
5,6 or 7	1	2	3	3	4	4	6	5	3	5	7	6	8	5	5	4
Less than 5	0	1	1	3	0	2	1	2	4	1	0	0	0	0	0	0

Figure 39. Employee Response by Age Range – 45 to 49

Grouped by Age

50 or older (7 responses)

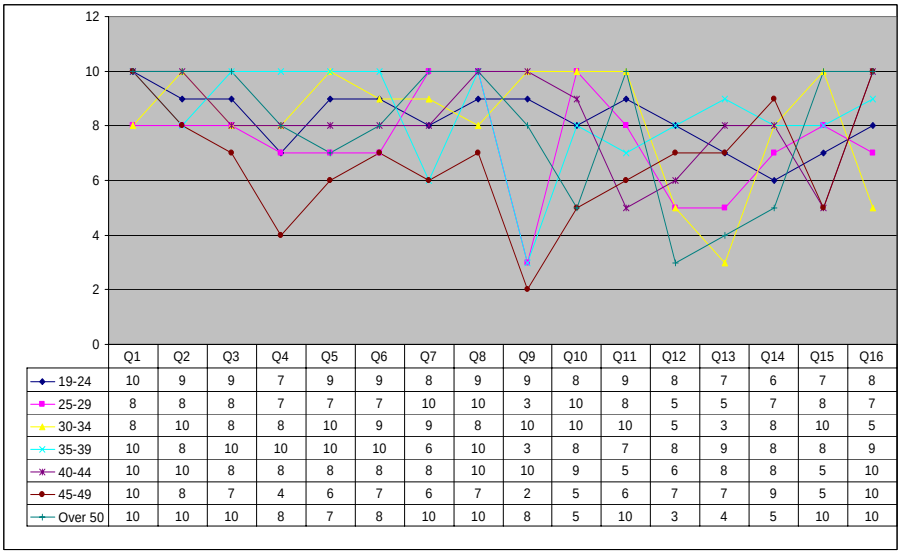


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
8,9 or 10	5	4	4	3	3	3	4	4	5	3	4	2	2	2	3	4
5,6 or 7	1	2	3	2	3	3	3	1	1	4	2	3	3	5	3	2
Less than 5	1	1	0	2	1	1	0	2	1	0	1	2	2	0	1	1

Figure 40. Employee Response by Age Range – 50 and over

Grouped by Age

(Mode)

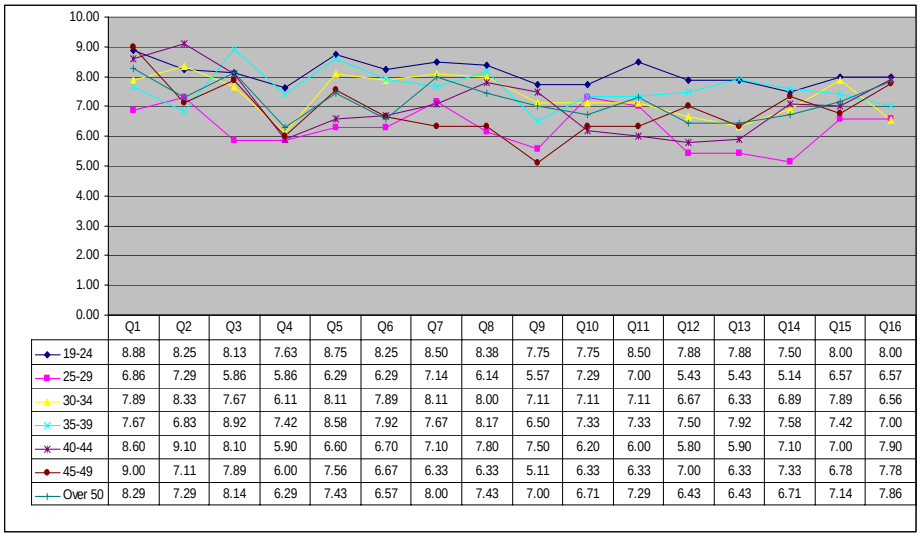


	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
19-24	10	9	9	7	9	9	8	9	9	8	9	8	7	6	7	8
25-29	8	8	8	7	7	7	10	10	3	10	8	5	5	7	8	7
30-34	8	10	8	8	10	9	9	8	10	10	10	5	3	8	10	5
35-39	10	8	10	10	10	10	6	10	3	8	7	8	9	8	8	9
40-44	10	10	8	8	8	8	8	10	10	9	5	6	8	8	5	10
45-49	10	8	7	4	6	7	6	7	2	5	6	7	7	9	5	10
Over 50	10	10	10	8	7	8	10	10	8	5	10	3	4	5	10	10

Figure 41. Employee Response by Age Range – Mode

Grouped by Age

(Averages – St. dev. of approx. 2)



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
19-24	8.88	8.25	8.13	7.63	8.75	8.25	8.50	8.38	7.75	7.75	8.50	7.88	7.88	7.50	8.00	8.00
25-29	6.86	7.29	5.86	5.86	6.29	6.29	7.14	6.14	5.57	7.29	7.00	5.43	5.43	5.14	6.57	6.57
30-34	7.89	8.33	7.67	6.11	8.11	7.89	8.11	8.00	7.11	7.11	7.11	6.67	6.33	6.89	7.89	6.56
35-39	7.67	6.83	8.92	7.42	8.58	7.92	7.67	8.17	6.50	7.33	7.33	7.50	7.92	7.58	7.42	7.00
40-44	8.60	9.10	8.10	5.90	6.60	6.70	7.10	7.80	7.50	6.20	6.00	5.80	5.90	7.10	7.00	7.90
45-49	9.00	7.11	7.89	6.00	7.56	6.67	6.33	6.33	5.11	6.33	6.33	7.00	6.33	7.33	6.78	7.78
Over 50	8.29	7.29	8.14	6.29	7.43	6.57	8.00	7.43	7.00	6.71	7.29	6.43	6.43	6.71	7.14	7.86

Figure 42. Employee Response by Age Range – Mode

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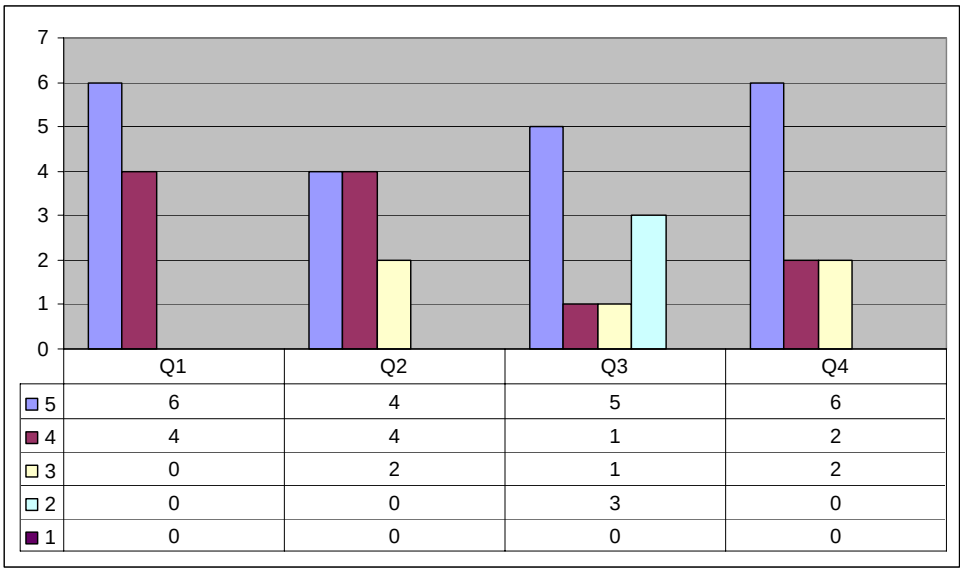
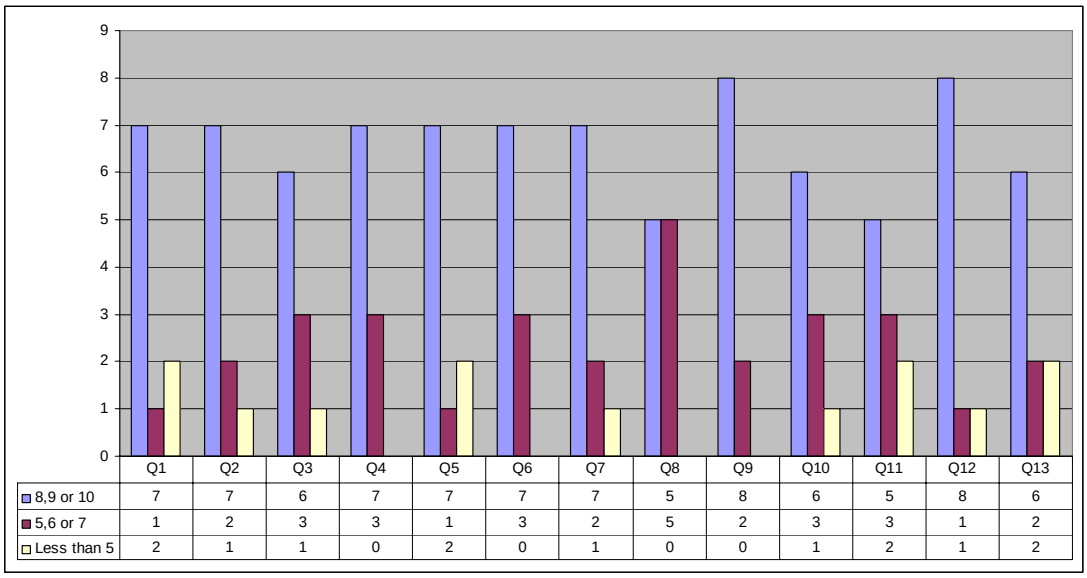
APPENDIX H: CUSTOMER RESPONSE GRAPHS



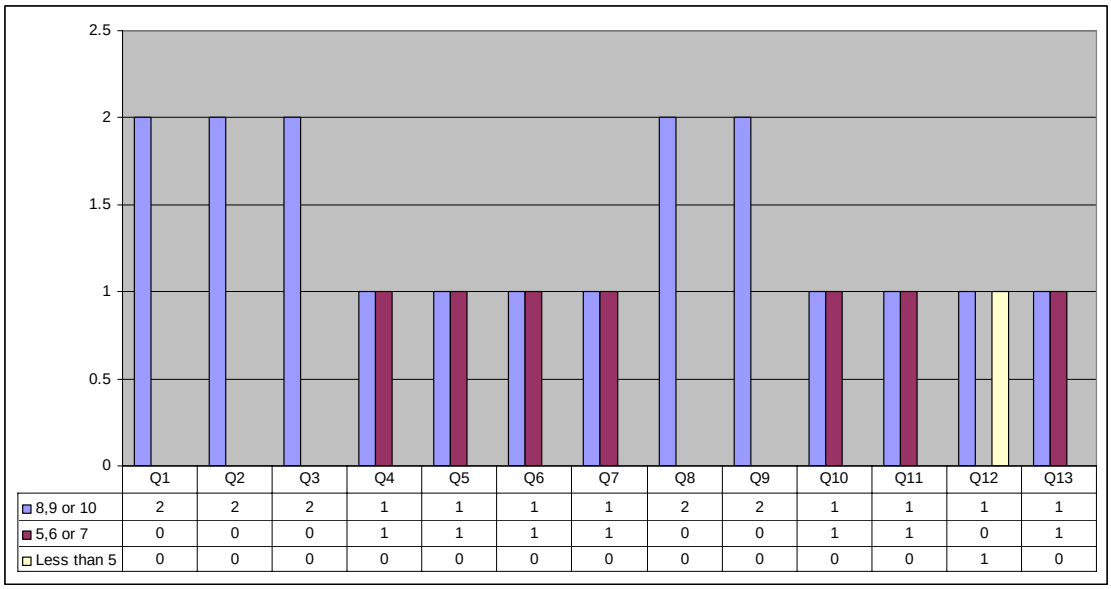
	Q1	Q2	Q3	Q4
5	6	4	5	6
4	4	4	1	2
3	0	2	1	2
2	0	0	3	0
1	0	0	0	0

Figure 43. Customer Responses to First Section



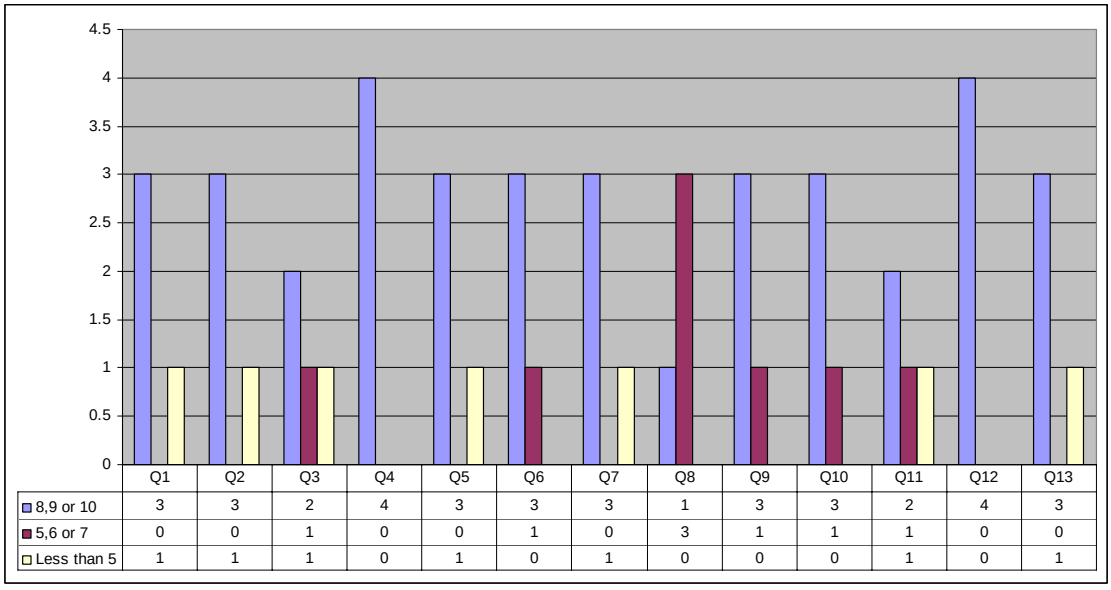
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
8,9 or 10	7	7	6	7	7	7	7	5	8	6	5	8	6
5,6 or 7	1	2	3	3	1	3	2	5	2	3	3	1	2
Less than 5	2	1	1	0	2	0	1	0	0	1	2	1	2

Figure 44. Customer Responses Second Section



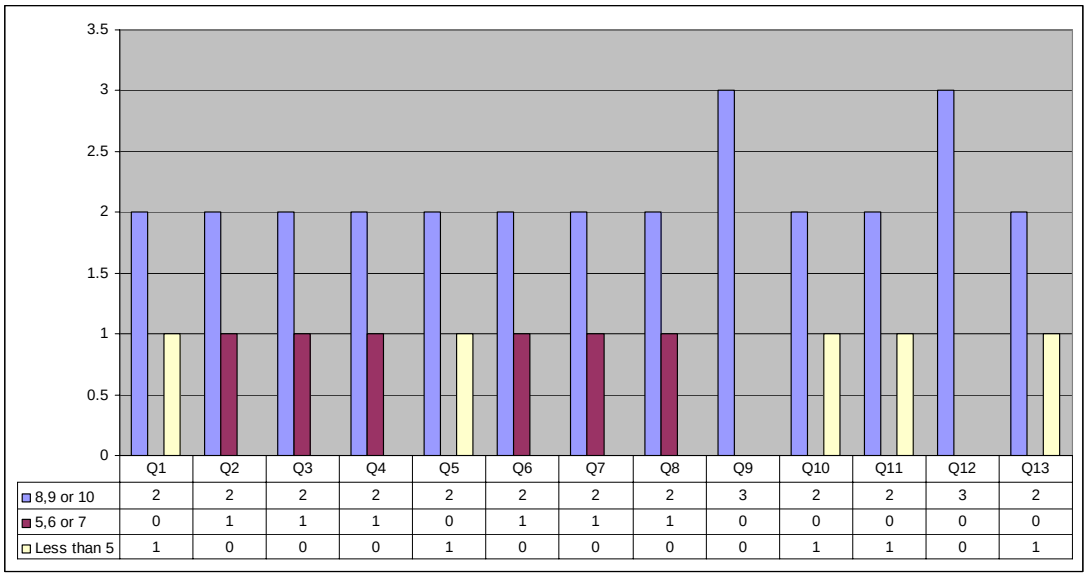
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
8,9 or 10	2	2	2	1	1	1	1	2	2	1	1	1	1
5,6 or 7	0	0	0	1	1	1	1	0	0	1	1	0	1
Less than 5	0	0	0	0	0	0	0	0	0	0	0	1	0

Figure 45. Customer Response by Relationship Length 1 to less than 3



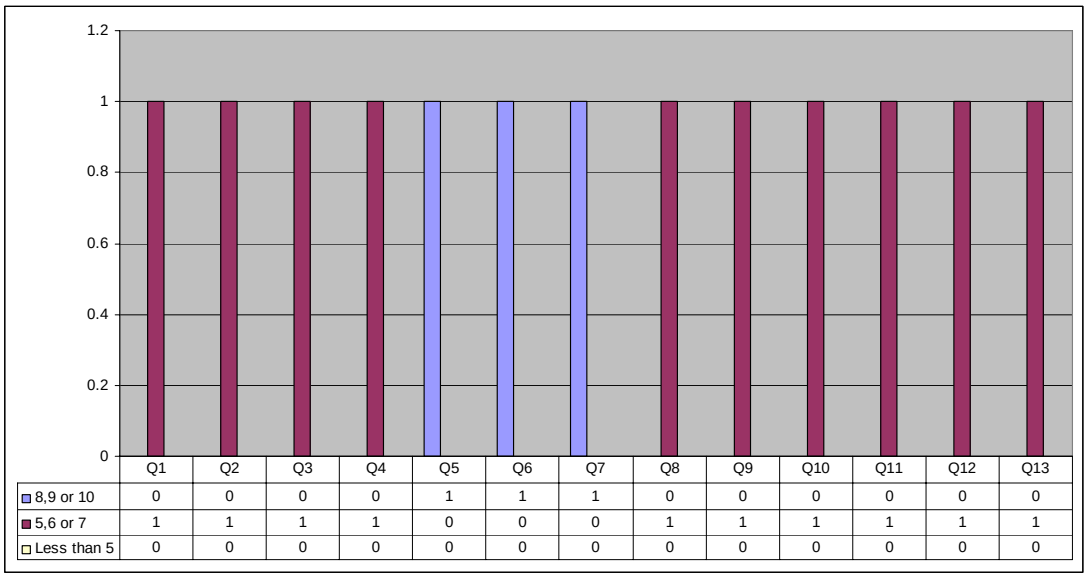
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
8,9 or 10	3	3	2	4	3	3	3	1	3	3	2	4	3
5,6 or 7	0	0	1	0	0	1	0	3	1	1	1	0	0
Less than 5	1	1	1	0	1	0	1	0	0	0	1	0	1

Figure 46. Customer Response by Relationship Length 3 to less than 5



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
8,9 or 10	2	2	2	2	2	2	2	2	3	2	2	3	2
5,6 or 7	0	1	1	1	0	1	1	1	0	0	0	0	0
Less than 5	1	0	0	0	1	0	0	0	0	1	1	0	1

Figure 47. Customer Response by Relationship Length 5 to less than 10



	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
8,9 or 10	0	0	0	0	1	1	1	0	0	0	0	0	0
5,6 or 7	1	1	1	1	0	0	0	1	1	1	1	1	1
Less than 5	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 48. Customer Response by Relationship Length 10 or more

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